

A SURVEY OF THE
SOCIAL STRUCTURE
OF ENGLAND & WALES

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OF ENGLAND & WALES

AS ILLUSTRATED BY STATISTICS

BY

A. M. CARR-SAUNDERS

AND

D. CARADOG JONES

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INTRODUCTION

STATISTICAL abstracts of social data exist, though not perhaps in any wholly satisfactory form. There is not, however, to be found any attempt to treat contemporary social data from what may be called the morphological point of view. This is the task attempted in this volume. Our aim is to present a coherent picture of some of the more important aspects of social life in this country so far as they can be illustrated by statistics. It is upon the relations of the various aspects of society that stress is laid. A grasp of these relations alone can give any life to the bare bones of social statistics. No attempt has been made to give more than a brief account of any subject treated. We have aimed at selecting the outstanding facts relating to each subject and at weaving them into a coherent whole. Rigorous selection of material has been practised and matter has only been included which contributes in some fashion to the construction of the picture.

This is a pedestrian task. We are concerned only with what can be quantitatively described. It is, however, a more difficult task than appears at first sight. There is no lack of some sort of data. The trouble is with their abundance and not with their paucity, and yet, in the precise form in which they are wanted, they are often tantalizingly deficient. How are we to weave a coherent scheme out of the chaos of such facts as lie to hand? A guiding thread has to be found and followed that will lead us through the maze and enable us to construct a picture of social conditions as a whole. The choice of a guiding thread is an arbitrary matter. There is no one way of dealing with the problem that is more logical and obvious than any other. Objections can easily be found to any scheme.

It seems likely that most schemes would begin with an analysis of the population. The bare census totals

take on meaning when the distribution of population by age and sex is discussed. The mention of the sex ratio leads to an examination of marital conditions and, since the population is not an aggregation of isolated units but is grouped into families, it is necessary to examine the facts as to their groupings (Chapter I). We are next led to ask how these family groups live, and the answer involves an inquiry into housing (Chapter II). Houses are unequally distributed, and we are led on to consider the extent of urbanization on the one hand and the geographical distribution of the population on the other (Chapter III). This distribution is explained by the unequal distribution of industrial facilities, and classification by industry claims our attention (Chapter IV). The daily life of man, however, is not so much affected by his industry as by his occupation (Chapter V) and by his industrial status (Chapter VI). In the course of these last three chapters many questions suggest themselves. How many 'idle rich' are there? Do 'hordes of officials' exist? Do most workpeople work indoors or out-of-doors? After an attempt to answer these questions, the fact that men voluntarily organize themselves on the basis of their occupation in industry into trade unions and professional associations deserves notice (Chapter VII). We are induced here to follow a by-path for a chapter, because men also organize themselves for political, social, and religious purposes, but in groups having little or no connexion with occupational associations (Chapter VIII). We return then to the main road and consider the national income and its distribution, since it is from their occupations that men gain their livelihood (Chapter IX); and the mention of the national income leads naturally to a discussion of the national wealth (Chapter X). Educational facilities above the level of the elementary school are in large part limited to persons above a certain level of income, and we thus come to inquire into the breadth of the educational ladder (Chapter XI). Education is always in part education for livelihood as well as

for life, and so the problem of entrance into industrial and commercial life arises and we are led to ask among other matters what kind of openings are available to school leavers (Chapter XII). Having entered industry, workers are faced with the dangers of ill-health and unemployment and with the prospect of old age, against which the State makes some provision (Chapter XIII). The State schemes involve a certain compulsory transfer of wealth from rich to poor, and this deserves mention because it affects the distribution of the national income previously described (Chapter XIV). Workers themselves also make voluntary provision against misfortune (Chapter XV), and the voluntary contributions of the rich to charitable and other schemes, the benefits of which they do not themselves share, bring about a voluntary additional transfer from rich to poor (Chapter XVI). In spite of these schemes and efforts, poverty exists on a large scale and calls for some attempt at exact measurement (Chapter XVII). Poverty is only one form of social failure that can be measured and treated quantitatively ; crime is another (Chapter XVIII). The discussion of poverty and crime shows that in some degree, though it may be only to a small extent, they arise from inborn deficiencies, and this leads to a discussion of the inborn characteristics of the population as a whole (Chapter XIX). This naturally gives rise to the reflection that the population may be recruited from its better or from its worse elements, and so the wheel has gone full circle and we come back to where we began in the first chapter. But it is not enough to analyse the population as it is : it is of the greatest importance to know also whither we are tending (Chapter XX).

Objections can easily be found to this scheme as a whole. It is easier still to object to the inclusion of some topics and to the exclusion of others. The exclusion of many important subjects is indeed the most obvious opening for criticism. Some criticism may be anticipated by stressing the fact that the scheme we have adopted involves the deliberate omission of purely commercial

and financial data. Social life is of course intimately dependent upon industry and trade, but our object is to describe social conditions and not their background. It will be found that, in the working-out of the scheme, facts have been taken from any authoritative source. Use has also been made of the results obtained by research workers, and the treatment often extends beyond a bare quotation of available figures. Existing data have been analysed and combined whenever by so doing it seemed possible to illuminate some problem of importance. For any data presented in a form substantially different from that in which they are to be found in the original sources we must bear the responsibility. Since the book is not primarily intended as a work of reference, the sources of information are given in an appendix and not in the text.

A word of explanation is required regarding the title. We have called the book *The Structure of English Society*, and for the most part our data relate to England and Wales only. Since Scottish data are usually given separately and not always in the same form, their inclusion would have often required additional tables and explanation. The loss in conciseness involved by extension to Great Britain would seem to outweigh the gain in completeness. When, however, as for instance in regard to income and wealth, data are only available for a larger area, they are used, and in this respect the title is not wholly accurate. Again, in one or two instances, as for instance in regard to population, Scottish figures are introduced. The reason for this departure from the scheme is that population statistics are fundamental, and so, since perforce data for Great Britain are used later in some places, it seemed desirable to give these fundamental facts for the whole area. Since many figures and references are quoted and many calculations are made, some errors are certain to be discovered though every care has been taken to avoid them. We shall appreciate the courtesy of readers who bring them to our notice.

It remains only to acknowledge the help generously given by those who have either read through various chapters or have answered questions concerning sources of information or matters of interpretation. It is scarcely necessary to say that they are in no way responsible for any statements which appear in the book. Among those to whom we are especially indebted are Professor Cyril Burt, Professor Henry Clay, Miss Ruth Darwin, Mr. A. W. Flux, Mr. C. F. Mott, Mr. Seebohm Rowntree, Sir Josiah Stamp, Dr. T. C. H. Stevenson, Dr. A. F. Tredgold, and the Registrar-General.

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I

POPULATION : AGE, SEX, MARRIAGE

EVERY tenth year a census is taken. From the census we get a figure for the total population of Great Britain including the Army and Air Force at home on the date in question and those serving in the Navy and Merchant Service who are ashore. The totals given by the most recent censuses are as follows:

TABLE I¹

Census Populations of Great Britain (000s).

Year.	England & Wales.		Scotland		Great Britain.		Total.	Percentage Increase on Total of Preceding Census.
	Males.	Females	Males.	Females	Males.	Females		
1881	12,640	13,334*	1,800	1,936*	14,439	15,271*	29,710	14
1891	14,053	14,950	1,943	2,083	15,996	17,032	33,028	11
1901	15,729	16,799	2,174	2,298	17,902	19,098	37,000	12
1911	17,446	18,625	2,309	2,452	19,754	21,077	40,831	10
1921	18,075	19,812	2,348	2,535	20,423	22,346	42,769	5

The total for any year other than a census year is not known with the same degree of accuracy, because it is a matter of estimation and not of enumeration. The Registrar-General makes an estimate of the total population each year, based upon the registration of births and deaths within the year and upon the recorded movements of people into and out of the country. This estimate for a variety of reasons is liable to error, though that made for 1921 was found to differ only by 33,000 from the final census total.

* The actual number of females in England and Wales, Scotland, and Great Britain in 1881 were recorded as 13,334,537, 1,936,098, and 15,270,635. Expressed to the nearest thousand the figures are therefore not incorrect as although the total does not equal the sum of its constituents Other like apparent discrepancy occurs in this table and elsewhere throughout the book.

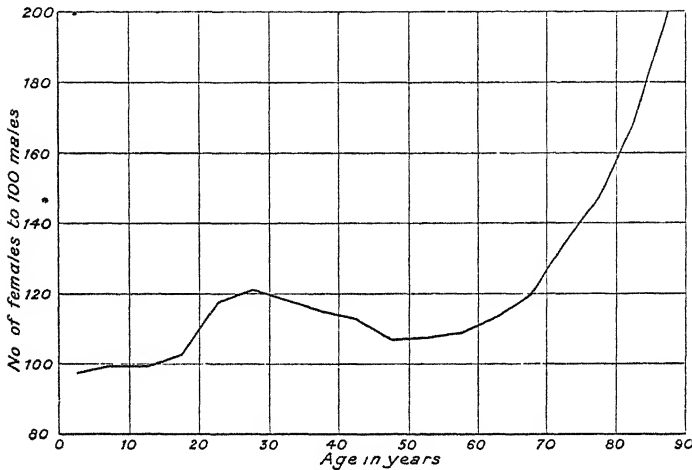
TABLE II.²*Estimated Post-Census Populations of Great Britain (000s).*

<i>Year</i>	<i>England and Wales.</i>	<i>Scotland.</i>	<i>Great Britain.</i>
1922	38,158	4,904	43,062
1923	38,403	4,901	43,504
1924	38,746	4,882	43,628
1925	38,890	4,893	43,783
1926	39,067	4,903	43,970

It is of necessity, however, the population of 1921 and not that of 1926 which in many respects must be the subject of discussion in this book. This is so because when a census is taken each householder fills up a schedule, replying to questions under some dozen (in 1921) different heads, and these replies when analysed and combined provide us with a large amount of information which is not available for other years. Thus we get for the census year a picture of the population showing, for instance, the number employed in each industry and the number following each occupation. As to these and other matters, therefore, it is the condition of things in 1921 that we are about to describe. Where information referring to a more recent date is available, it will be used. If it is objected that the conditions of 1921 are past history it may be replied that, owing to the vast amount of calculation required, the most important census results were only published in 1925, and the final volume in the spring of this year (1927). The information is therefore fresh, if not up to date.

Table I, in addition to giving the total population each year, makes an analysis of it according to sex. It will be noticed that in 1921 there were in England and Wales about one and three quarters of a million more females than males. It is not mere pedantry to use the terms male and female, because the figures refer to all ages and include babies. The sex ratio at this date may be expressed by saying that there were 1,096 females to every 1,000 males. This is a high figure. Since the first census in 1801 the proportion has never been less than 1,036 to 1,000 (in 1821), and never more than 1,068 to 1,000 (in 1901 and 1911).³

The problem of the sex ratio is not simple. Though females predominate in the population as a whole, more boys are born than girls. In consequence of this excess of male births, males outnumber females in the earlier age groups up to age 15, as Table III shows. Among all those over fifteen years of age females are in excess, and the older the group the greater in general is the excess of females. Among those eighty-five years old and over there are more than two women to each man.



Sex Ratio in relation to Age

There are two reasons why in normal times women predominate in the population as a whole, in spite of the preponderance of boys over girls at birth. Women are more hardy than men, and they are better able to resist the strains and stresses of life. Thus in one very real sense the female sex is not the weaker sex. Again, men are more exposed to accidents than women owing to the nature of their employment. It is for the most part men and not women who perish in disasters at sea, in mine accidents, and railway fatalities. But we have recently passed through an abnormal period when large numbers of men have been exposed to an unusual risk—

that of death in war. This last fact accounts for the remarkable preponderance of women at the present day.

TABLE III.¹

Sex Ratio : Females to 1,000 Males. England and Wales, 1921.

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Ratio	976	992	992	1,027	1,176	1,209	1,186	1,156	1,127	1,070
Age	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-	<i>All Ages</i>	
Ratio	1,074	1,086	1,132	1,194	1,342	1,476	1,685	2,052	1,096	

The mean ratio of 1,096 women to 1,000 men is an average for the whole of England and Wales. We have seen that it does not hold good for different age groups. It may also be noticed that it does not hold good for different localities. Thus in rural districts as officially defined there were 1,026 females to every 1,000 males, whereas in urban districts, including London and County Boroughs, there were 1,115 females to every 1,000 males. In the Administrative County of London the ratio was as high as 1,165 females to every 1,000 males;⁵ and in general it may be said that the larger the town the higher the ratio.

We have touched upon age distribution in relation to sex. Age distribution is of great importance quite apart from sex. There is no such thing as a standard age distribution; different communities are markedly contrasted one with another in respect to the proportion which those of school age, those of working age, and those who have retired from active life, form of the whole population. Many factors play a part in making the age distribution in any community what it is. First in importance is the birth-rate. An increase in the birth-rate will increase, and a diminution in the birth-rate will decrease, the proportion of young persons. Secondly, immigration and emigration affect the position. The former causes an influx of young people, because it is the young rather than the old who move, while the latter has the opposite result. Thirdly, the death-rate is obviously a powerful factor. Not only are different communities strongly contrasted with one another in

these three respects, but the age distribution may change markedly within any country during a relatively short space of time as one or more of these factors change in intensity. The following table shows the changes that have taken place in the age distribution of Great Britain during the last 30 years:

TABLE IV.⁶*Great Britain.*

Number and Proportion of Persons under and over 15 Years of Age.

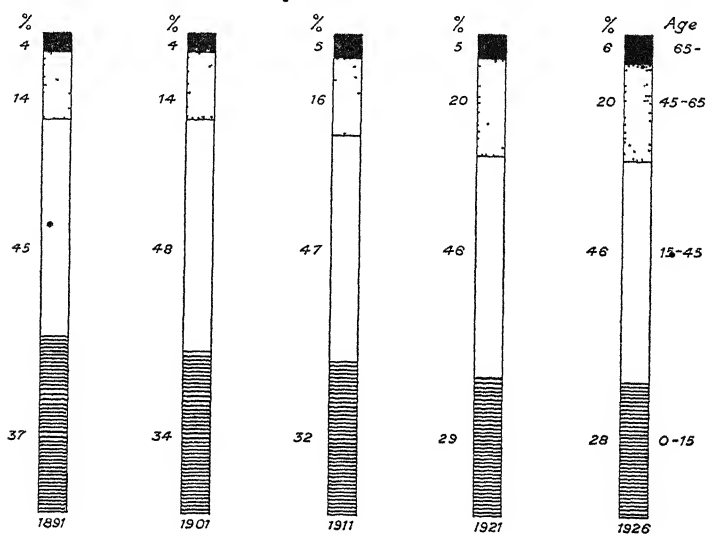
Year.	Number (000s).		Percentage.	
	Under 15	Over 15	Under 15	Over 15
1891	11,604	21,424	35	65
1901	12,041	24,959	32.5	67.5
1911	12,588	28,243	31	69
1921	11,940	30,829	28	72

TABLE V.⁸*Great Britain: Males.*

Age last Birthday.	Numbers (000s).					Percentage of Year's Total				
	1891.	1901.	1911.	1921.	1926	1891	1901	1911	1921.	1926.
0-4	2,030	2,124	2,204	1,920	5,800	13	12	11	9	28
5-14	3,775	3,898	4,100	4,091		24	22	21	20	
15-44	7,283	8,522	9,404	9,359	9,636	45	48	47	46	46
45-64	2,226	2,609	3,132	3,950	4,224	14	14	16	20	20
65 & over	689	749	914	1,103	1,240	4	4	5	5	6
0-14	5,805	6,022	6,304	6,011	5,800	36	34	32	29	28
15-64	9,509	11,131	12,536	13,309	13,860	59	62	63	65	66
All Ages	16,003	17,902	19,754	20,423	20,900	100	100	100	100	100

The number of children under 15 years of age in 1921 was much the same as in 1891 though the total population had increased by nearly 10 millions during these 30 years. In other words children, though absolutely about the same in number, are relatively scarcer than they were 30 years ago. It is interesting in this connexion to note that the number of scholars on the books of ordinary Public Elementary Schools, Higher Elementary Schools, Special Schools, and Certified Efficient Schools in England and Wales, reached its highest point in 1915, when it was 6,109,000. Since then it has

steadily fallen.⁷ This fact has an obvious practical bearing. We need to build houses faster than we need to build schools, because the population as a whole is growing faster than the school population. These changes, however, are of still wider importance. As a community we are, at least so far as years count, less youthful than we were. This almost certainly affects our outlook, but upon that matter statistics shed no light.



Percentage Age distribution, 1891-1926

Statistics, however, may be used to illustrate the position regarding the changes in the proportion of the population which is of working age, as in Table V which refers to males only.

If we regard those who are under 15 and those who are over 65 as the dependent section of the community, it is seen that this section is slightly less relatively important than it was. In other words, a rather larger proportion of the population is of working age as thus defined. But important changes have taken place within both the dependent and the working sections of the population. The former now consists of a proportion-

ately larger number of old people than was formerly the case. The workers labour increasingly to support the pensioners rather than the coming recruits to industry. Among the working section those over 45 have relatively increased, whereas those under 45 bear about the same proportion to the total as they did 35 years ago. In fact, and it is a matter of much importance, the employable section of the population is on the average older than it was. The question of age distribution has also an obvious bearing upon health and mortality, because the hand of death falls heavily upon infants and the elderly. Where the elderly are relatively numerous, there cancer and diseases of the circulatory system will play a larger part than in a community where infants are relatively numerous. Death employs quite different weapons in its attack upon the young, who fall victims to diarrhoea, measles, and such-like maladies.

Again, there are local differences in age distribution just as there are local differences in sex distribution. In general, as appears below, there is not much difference between town and country in the proportion which those of school age and less bear to the whole population. But those of working age form a higher proportion of the urban than of the rural population, while those of 60 years of age and over are relatively more numerous in the country. This is partly due to the fact that country dwellers live longer, and partly to the fact that town dwellers when they retire often go to live in the country.

TABLE VI.^a

England and Wales, 1921. Males.

Area.	Average Age.	Age Distribution per 1,000.						
		0-4	5-13	14-19	20-39	40-59	60-	All Ages
Urban Districts	29.7	93	180	115	299	231	82	1,000
Rural ,,	30.8	92	177	120	280	223	108	1,000

Once the total population has been ascertained the sex ratio and age distribution suggest themselves as matters for immediate inquiry. But the fullest informa-

tion regarding these matters does not get us far in the direction of constructing any picture of the community. This is so because society is not composed of units thrown together by chance like so many grains of sand. It consists of groups of persons who, at least so far as the adult members of the groups are concerned, have come together consciously and of set purpose. These groups are typically family groups—father, mother, and children, with whom may be living other relatives. The best term is perhaps ‘household’. The household is important not only because it plays so large a part in emotional life, but also because within it there is an element of communism, at least to the extent that what is important is family income and not individual income. It is therefore clear that information is required as to the number, size, and other characteristics of households in this country. At the same time it is obvious that to these questions no simple statistical answer can be returned. We cannot state the position so clearly as we could in discussing age distribution and the sex ratio, for the simple reason that it is not easy to define a household; nor is it easy to ascertain how many households there are, whatever may be the definition selected.

Since the group is typically a family group the problem may be approached by asking how many married persons there are. The following table sets out what may be called the marital condition of the population:

TABLE VII.¹⁰

Marital Condition of the Population of England and Wales, 1921.

	Number (000s)		Percentage.	
	Males	Females	Males	Females.
Single	9,949	10,591	55.0	53.5
Married	7,475	7,590	41.4	38.3
Widowed	642	1,622	3.6	8.2
Divorced	8	8	0.0	0.0
Total	18,075	19,811	100.0	100.0

From this table we learn that there were in 1921 rather less than $7\frac{1}{2}$ millions of married men and rather more than that number of married women. The excess

of married women is not due to any unsuspected lingering on of polygamy in our midst, but to the fact that at any given time some thousands of married men are abroad or on ship, having left their wives at home. Since very few married couples will not form the centre of a single household we can put the minimum number of households at $7\frac{1}{2}$ millions. With the help of this table alone we cannot go further than this. The number of households must be greater than $7\frac{1}{2}$ millions because many of the 640,000 widowers and of the 1,600,000 widows have households of their own. In addition, some unmarried persons maintain households.

Before, however, we pass on to consider other evidence bearing upon this matter of households, the above table repays rather more careful examination. Divorced persons, whatever immoral influences may be attributed to them, are certainly negligible in numbers, though it appears probable that the returns made are far from being complete. Considerably more than half the recorded total of divorced persons were between the ages of 25 and 45.¹¹ Perhaps the most remarkable fact revealed by the table is that there are almost three times as many widows as widowers. In 1921 there was a large legacy of war widows. But there are other causes, unconnected with war, which tend to produce more widows than widowers. There is the greater industrial mortality among men and the longer average life of women—two factors which of course are not unconnected. Again, men are on the average older than women when they marry and so tend to die earlier. Also, the excess of women over men probably results in widowers marrying more readily than widows. The preponderance of widows is marked at every age group and is not peculiar to 1921, which proves that it is not simply a war effect.

It is worthy of note that the marriage rate, that is, the number of persons who get married in a year per 1,000 living at all ages, maintains a remarkable constancy. In successive five-yearly periods from 1841 to 1925 the

extreme variation of the mean rate was from 14.7 to 17.1, and the mean for the whole period 1838 to 1925 was 16.0.¹²

If figures are examined which give the age distribution of the single, married, widowed, and divorced, it is found that while of men aged 20-24 only about one-sixth are married, more than half the men aged 25-29 are married.¹⁰ The mean age at marriage for men is 29 and for women 27, but the commonest age at marriage is somewhere between 21 and 25 for spinsters and rather later for bachelors.¹³ In the subsequent age groups the proportion of single men sinks, until in the age groups above 50 it may be said very roughly to be one-tenth of the total of those above this age. About one-quarter of all women 20-24 years old are married. Of women over 50, about one-sixth remain single.¹⁰

It seems to be generally supposed that a woman has less chance of marriage after than she had before the war. The following table shows that on the average in 1921, out of every 1,000 women over 15 years old, 520 were married, whereas in 1911 only 506 were married. This widespread notion is thus refuted.

TABLE VIII.¹⁴

Proportions per 1,000 of Single, Married, and Widowed, Ages 15 Years and upwards, in England and Wales.

	Males.			Females.		
	Single.	Married.	Widowed.	Single.	Married.	Widowed.
1901	411	536	53	395	497	108
1911	403	545	52	390	506	104
1921	365	584	51	368	520	112

The marital condition of the population first attracted our attention because it throws some light upon the number of households. Let us now return to that problem. Some further information upon it may be obtained by the use of that part of the census which deals with housing. The census gives the total number of 'private families' as 8,739,197,¹⁵ and defines a 'private family' as 'any person or group of persons included in a separate return as being in separate occupation of any

premises or part of premises . . . lodgers being so treated: only when returned as boarding separately and not otherwise'. It is further explained that 'private families' comprise all such groups 'with the exception of those enumerated in (1) institutions, or (2) business establishments or boarding-houses in which the number of resident trade assistants or resident boarders exceeds the number of members of the employer's or householder's family (including private domestic servants)'.¹⁶ How far in the light of this definition can we regard the 8,739,197 'private families' as 'households' in the true sense? It would appear that a few 'households' will not be included among the 'private families'. This will apply for instance to families in lodgings not recorded as boarding separately. A more serious divergence between the official conception of a 'private family' and our conception of a 'household' arises from the fact that single persons living alone are counted each as a 'private family'. There were 526,856 such persons in 1921, accounting for 526,856 of the 8,739,197 'private families'.¹⁵ Since it takes at least two persons to form a household, the total of 'private families' must be reduced by some half million to correspond to our conception of the total number of 'households'. It would therefore seem probable that there were in 1921 about eight million 'households', most of which centre round a married couple. But we have only the official figure as to 'private families' and therefore exact information on the point is limited.

The total population in 'private families' was 36,179,946,¹⁵ and from this two facts follow. First, there were 1,706,753 persons who were not then living with any 'private family'.¹⁷ Among them were 854,883 persons in 'institutions', including soldiers and sailors, and all those in workhouses and hospitals, reformatory schools and prisons, many of whom were only temporarily separated from their families.¹⁸ The remainder include persons in hotels, employees 'living in', and others, again for the most part only temporarily separated from

their families. It is impossible to estimate how many persons there are without attachment to any group; but they must be few in number. Secondly, since the number of 'private families' and also the total population in 'private families' are known, the average number of persons per 'private family', as officially defined, is easily calculated and works out at 4.14.¹⁹

Averages in this as in so many cases may mean little. The following table shows that the 'private family' of three is the most common type of 'private family', and that more persons belong to a 'private family' of four than to any other type of 'private family'.

TABLE IX.¹⁵

Private Families classified by Size: England and Wales, 1921.

Number of Persons in Family.	Families.		Population.	
	Number (000s).	Percentage	Number (000s).	Percentage.
1	527	6.0	527	1.5
2	1,547	17.7	3,094	8.6
3	1,824	20.8	5,471	15.1
4	1,625	18.6	6,501	17.9
5	1,214	13.9	6,067	16.7
6	818	9.4	4,911	13.6
7	520	6.0	3,640	10.1
8	315	3.6	2,518	7.0
9	179	2.1	1,614	4.5
10	98	1.1	983	2.7
11	41	0.5	446	1.2
12	18	0.2	212	0.6
13	7	0.1	96	0.3
14	3	0.0	47	0.1
15 and over.	3	0.0	53	0.1
Total	8,739	100.0	36,180	100.0

The 'private family' largely centres round the true family, and it is natural next to inquire into the size of the family in the ordinary sense of the word. The fact that there are on the average 1.27 living children and stepchildren under 16 per married man again means little.²⁰ Far more important is information showing how many families there are of varying sizes. .

The commonest type of family as shown by these

figures is that in which there are no children under 16. In many cases the children have grown up ; in others they have not yet arrived. The statement therefore does not mean that married men who never have children are more common than those who have one or more. It merely means that in 1921 there were more married men with no children under 16 than with two, three, or any other number of such children. Also, the total number of children under 16 in families having two children under that age was greater than the total number of such children in families of any other size.

TABLE X.²¹*Families of Married Men of all Ages.*

<i>Number of Children and Step-children under 16 in the Family.</i>	<i>Number of Families (000s).</i>	<i>Total Children (000s).</i>
Not stated	1,031	—
0	2,196	—
1	1,716	1,716
2	1,139	2,279
3	658	1,973
4	371	1,486
5	205	1,022
6	101	605
7	40	283
8	13	103
9	4	32
10 and over	1	10
Total	7,475	9,509

POPULATION: HOUSING

OUR analysis of the population has led us to visualize groups of persons in the form of households rather than individuals as the true component units of the community. We are led to ask how and where these households live. This chapter attempts to answer the first of these questions, leaving the second for separate treatment in the next chapter. We are therefore concerned here with housing.

The Englishman's ideal in this matter is 'Every household its own house'. He draws a sharp distinction between a house and a flat, and has shown, in any case until recently, a marked repugnance to living in a flat. In this he is not peculiar. The inhabitants of the Dominions, of the United States of America, and of some European countries, though not many, share his preference for houses. This horizontal rather than vertical distribution of the population involves the sprawling of towns over considerable areas. But the houses in English towns have until recently been built so close together and with so few open spaces that relatively speaking no vast areas are covered. The newer American cities, however, such as Detroit and Los Angeles, have not adopted this close packing system, because almost every household in the community is able to afford a car and garage and can thus disregard distances, with the result that the sprawling tendency rapidly leads to a huge extension of the city area.

The census provides our main source of information with regard to housing. The facts given in the census are detailed and voluminous. It is not any defects in the census methods, but the fact that housing conditions are not easily susceptible to statistical treatment, which makes it difficult to construct any illuminating picture out of

these data. It is a comparatively simple matter to count houses and the rooms contained in them, but how is it possible, short of making an inquiry of a magnitude that is quite impracticable, to throw light upon the size of the rooms and therefore of the amount of space available? There are thus very definite limitations to the precision of the details which we can place in our picture. Further, the 1921 census was taken when great efforts were in progress to build houses; these efforts have been to a considerable extent successful. In no other respect has the position changed so much since the census as in housing. But it is only in the census year that we get any elaborate data about housing. In the census year we know something about overcrowding as judged by the number of persons per room; we know also how many houses have been built year by year since the census; but how far overcrowding has been relieved we do not know, and we shall not know until the results of the 1931 census have been published. Therefore the best we can do is to present the more important aspects of the housing conditions of 1921, and add information as to the number of houses built since that date.

In order to understand the census data it is necessary to take careful note of the meaning of three terms employed. These terms are building, structurally separate dwelling, and room. The term building is used in the census much as it is used in everyday life. It is defined as a 'structure wholly detached or separated from another by a vertical party wall'.¹ Thus in addition to buildings standing by themselves, a semi-detached house and a house in a row of houses without intervening spaces are 'buildings'. So, too, is a block of flats a building, though there are one or more separate flats on each floor. It will be noticed that in Table XI buildings are subdivided into several categories. The subdivisions are self-explanatory, though it may be added that the second category of 'structurally divided private houses' is intended to comprise houses originally built for the

occupation of a single family and subsequently divided into flats. In 1921 this process had not been carried far. The 1931 census will certainly show a very large increase in the number of 'structurally divided private houses'.

A 'structurally separate dwelling' is defined as 'any room or set of rooms, intended or used for habitation, having separate access either to the street or to a common landing or staircase'.¹ In other words, an undivided house is a dwelling in this sense, and so is each flat in a block of flats. A group of rooms with a front door, even if that front door leads only on to a common staircase, is also a dwelling. Thus a 'dwelling' corresponds to what is ordinarily thought of as a home. Separate rooms in a lodging-house occupied by separate families are not so thought of and are not officially classed as dwellings. When a family, say that of a shopkeeper, lives in a house also used for business purposes, the house is treated by the census authorities as occupied by a private family unless the part used for business purposes consists of at least three rooms and is more than one quarter of the whole.

It is important to notice that the only 'rooms' enumerated in the census are the usual living-rooms, including bedrooms and kitchens. Sculleries, landings, lobbies, closets, bathrooms, any warehouse, office, or shop rooms are excluded.¹ With these definitions in mind let us first examine Table XI, which summarizes the position in 1921. In that table all the people of England and Wales have been divided up according to the types of buildings they occupied at the date of the census. A glance at the figures shows how small a part flats and tenements played in housing our population. There were little more than a million persons so housed, representing less than 3 per cent. of the whole population. It will be seen further that $2\frac{1}{2}$ per cent. of the population were housed in institutions of one kind or another, about 4 in every 1,000 lived in hotels, and nearly 93 per cent. in private houses or houses associated with shops.

TABLE XI.¹*England and Wales, 1921.**Completed Buildings and Population Dwelling therein.*

• Completed Buildings.			Population.	
Nature	Number (000s).	Per cent of Total	Number (000s)	Per cent. of Total.
Undivided Private Houses	7,158	86.4	33,027	87.2
Structurally Divided Private Houses	18	0.2	159	0.4
Blocks of Flats, Tenements, &c.	84	1.0	1,103	2.9
Hotels	5	0.1	132	0.4
Institutions	12	0.1	907	2.4
Shops	614	7.4	2,067	5.4
Offices, Warehouses, Factories, Workshops	156	1.9	74	0.2
Places of Worship	51	0.6	3	0.0
Places of Amusement	4	0.1	1	0.0
Others	186	2.2	414	1.1
Total	8,288	100.0	37,887	100.0

TABLE XII.¹*Structurally Separate Dwellings in the Occupation of Private Families.*

Dwellings each Occupied by	Number of Dwellings (000s).	Number of Families (000s).
1 Private Family	7,007	7,007
2 " Families	598 } 753	1,196 }
3 or more Private Families	155 }	536 } 1,732
Total	7,760	8,739

The English ideal is, as said above, for each family its own house. Table XII shows how far we were in 1921 from realizing this ideal. There were 753,000 dwellings (which term, it will be recollected, covers both houses and flats) each sheltering two or more private families, and the total number of families thus sharing a home was nearly $1\frac{3}{4}$ millions, or about one in every five of all private families. This crowding of two or more families into one dwelling may or may not imply overcrowding in the medical sense. It certainly does imply conditions under which family privacy is impossible. A household without its own front door cannot regard its home as its castle. When the census was

taken there were in all roughly $8\frac{3}{4}$ million families occupying $7\frac{3}{4}$ million dwellings. But the position was not so bad as these figures seem to imply. These families are 'private families' in the official sense, and of them over half a million consisted of one person only, such as lodgers occupying rooms in a house but not boarding with the householder's family, as we saw in the last chapter. Even under ideal housing conditions it would not be proposed that separate dwellings should be found for all of these persons.

Overcrowding is assumed to exist, according to the definition adopted by the census authorities, in any house which contains more than two persons per room, understanding by a room a living-room or bedroom as already explained. According to this standard 9.6 per cent. of the private family part of the population of England and Wales was living under overcrowded conditions in 1921, while in London the percentage stood at 16.1. There were, in fact, roughly $3\frac{1}{2}$ million persons in private families then living with less than one room to two persons, and nearly $17\frac{1}{2}$ million persons with less than one room apiece.²

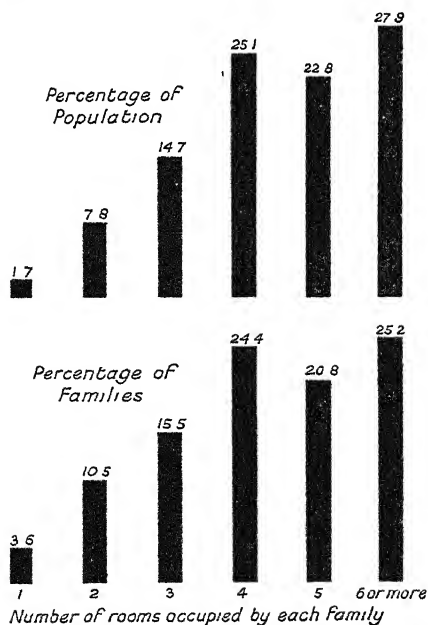
But this standard is an imperfect one, because it takes no account of the size of rooms, and rooms vary greatly in size. The differences between one town and another in respect to overcrowding so measured may be partly explained as due to a greater average size of room in one town than in another. The measure, however, has a distinct value, and wide differences, as between Jarrow with 42.3 per cent. of the private family population living more than two to a room, and Bedford with only 1.4 per cent. so living, are certainly indicative of true differences in conditions.³

Another and in some respects a better picture of the extent of overcrowding is obtained by finding how many families there are living in one room, how many in two rooms, and so on, and what proportion of the population they represent. In Table XIII all the private families in the country are divided up on this principle. It is

possible to see also how the various groups stand with reference to the official measure of overcrowding defined above ; the results are given in the last column of the table. It appears that over 95 per cent. of the whole population live in private families,⁴ and on the average each person occupies rather more than one room.⁵ Naturally the families occupying the smallest number of

TABLE XIII.⁵
Families and Population in Private Families in Relation to Rooms occupied.

<i>No. of Rooms occupied by each Family</i>	<i>Families.</i>		<i>Population</i>		<i>Average No of Rooms per Person.</i>
	<i>Number (000s)</i>	<i>Percentage.</i>	<i>Number (000s)</i>	<i>Percentage.</i>	
1	317	3.6	624	1.7	0.51
2	918	10.5	2,835	7.8	0.65
3	1,359	15.5	5,330	14.7	0.76
4	2,144	24.4	9,053	25.1	0.95
5	1,815	20.8	8,247	22.8	1.10
6 or more	2,186	25.2	10,091	27.9	—
All Rooms	8,739	100.0	36,180	100.0	1.10



rooms, other things being equal, are more likely to be overcrowded, and this is borne out by the upward gradation of the numbers in the last column of Table XIII.

It is sometimes suggested that housing conditions in rural areas are less satisfactory than in towns. It is true that in the country there are relatively more houses with few rooms—and, at the other extreme, more houses with many rooms—than in the towns, but this does not carry the implication* that there is more overcrowding in the country. Speaking generally, the facts are quite the other way, as the following figures indicate:—

TABLE XIV.^a

England and Wales, 1921.

*Proportion per 1,000 Population in Private Families occupying
a Mean Number of Rooms per Person as below. -*

	<i>Under 0.3.</i>	<i>0.3 & under 0.5</i>	<i>0.5 & under 0.7</i>	<i>0.7 & under 1.0.</i>
Urban Districts	16	88	225	169
Rural Districts	7	58	180	170

Another method of comparing two areas in respect of crowding is to calculate the number of persons per acre in each. This method is of value when used to compare different areas of the same town, say one ward with another, so long as the areas under consideration do not include open spaces in one case and none in the other, and provided that the nature and height of the buildings are approximately the same in both. It is not often, even when comparing small areas in the same town, that we find these conditions are adequately fulfilled. They are seldom or never fulfilled when comparing different towns, and the comparisons made without due allowances for such factors may be misleading. Further, it is often extremely difficult to make adequate allowances. The area covered by docks and open spaces may be calculated and subtracted from the total area occupied by each town; but no method offers itself whereby allowance can be made for the fact that factories, work-

shops, and railway sidings may occupy more space in one town than in another.

When a finger is pointed at the housing conditions in this country, those who are criticized have been known to divert the attention of their critics to certain parts of Scotland, with the implication that we can be thankful that at least we are not as other people are. It may be well therefore to examine the statistics for Scotland. Unfortunately they are not given in the same form as the English figures, and the best we can do is quote them and allow the reader to draw his own conclusions, with the remark that a strict comparison between the two countries may be difficult.

To appreciate the tables the meaning of the terms 'house' and 'room' must be made clear. A house is defined in Scotland as a dwelling (1) with a distinct outside entrance from a street, lane, road, &c., or (2) with a door opening directly into a common stair or passage, and such a dwelling must, therefore, be counted as one house, even although it is subdivided and occupied by more than one family or separate occupier. Kitchens are to be counted as rooms; but sculleries, pantries, bathrooms are not to be counted, nor rooms used as offices, shops, or for other business purposes.⁷

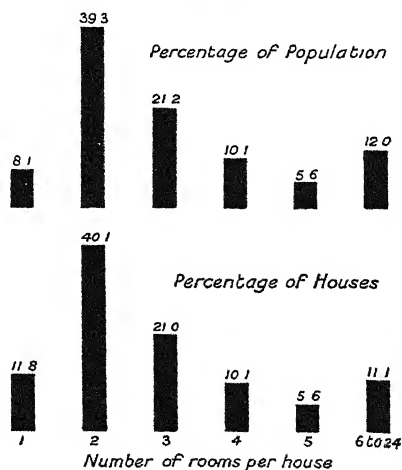
The total population was 4,882,000 and the total number of occupied houses was 1,058,000, representing a mean rate of occupation of 4.62 persons to each house.⁸ Twelve per cent. of the houses were one-roomed and 40 per cent. two-roomed.⁹ If persons in houses of 25 rooms and over, or in households of 20 persons and over, and certain others on board ship, &c., are excluded, of the remaining 4,699,000, 43 per cent. were living more than 2 to a room, 21 per cent. were living more than 3 to a room, and 9 per cent. were living more than 4 to a room.¹⁰ The average number of persons per room was 1.42.⁹ The following table shows in more detail how these 4,699,000 people were housed. It may be compared with Table XIII relating to England and Wales, which is something of the same, though not precisely the same, character.

POPULATION

TABLE XV.⁹

Scotland, 1921.
Houses and Population in Relation to Rooms.

<i>Houses of</i>	<i>Houses.</i>		<i>Population.</i>		<i>Average No. of Rooms per Person.</i>
	<i>Number (000s).</i>	<i>Percentage of All Houses.</i>	<i>Number (000s).</i>	<i>Percentage of Total Popln.</i>	
1 Room	124	11.8	397	8.1	0.31
2 Rooms	424	40.1	1,919	39.3	0.44
3 "	222	21.0	1,036	21.2	0.64
4 "	107	10.1	494	10.1	0.87
5 "	59	5.6	270	5.6	1.09
6 to 24 "	118	11.1	583	12.0	—
Total	1,054	99.7	4,699	96.3	



The total number of separate occupiers, for which computation a lodger but not a boarder is taken as a separate occupier, was 1,108,000, or 1.047 to each separate house as compared with 1.026 in 1911. The subletting of rooms or portions of houses, whether for the use of families or lodgers, is thus slightly more frequent than it was before the war.

It is, however, not the position in 1921 so much as the present shortage of houses and the prospects of overtaking it which are of interest. The shortage was observed before the war and seems to date from about

1911. This does not imply that housing was satisfactory in 1911, but only that accommodation, however inadequate in quality, was not seriously deficient in quantity. During the war, building practically ceased for five years; in London there was a net addition of only 30 houses in 1915-16.¹¹ The comparison of 1911 with 1921, which is made in the following table, illustrates the change for the worse between 1911 and 1921. The number of private families per occupied dwelling increased owing to the fact that, while the number of dwellings increased by 7 per cent., the number of private families increased by over 10 per cent. At the same time, owing to the reduction in the size of families, the number of persons per occupied dwelling fell from 4.93 to 4.85. If the housing position in 1921 is contrasted with that in 1911 on the basis of rooms, allowing for the size of families, the deficiency in 1921 relative to 1911 amounted to no more than 3 per cent.¹² It should be added that these figures take no account of the worsening of the quality of housing owing to neglect of maintenance and repairs during the war.

TABLE XVI.*

*England and Wales.**Number of Dwellings and Private Families.*

	1911.	1921.	Increase or Decrease, 1911-21.	
			Amount.	%
Structurally Separate Dwellings occupied	7,319,420	7,811,030	+ 491,610	+ 6.72
Structurally Separate Dwellings vacant	430,048	218,833	- 215,215	- 49.58
Private Families	7,943,137	8,739,197	+ 796,060	+ 10.02
Excess of Private Families over Occupied Dwellings	623,717	928,167	+ 304,450	—
Average No. of Persons per Occupied Dwelling	1.09	1.12	—	—
No. of Persons per Occupied Dwelling	4.93	4.85	—	—

* In 1911 structurally divided houses were not separately identified, and the total dwellings shown for that year is understated to the extent to which such houses were returned as undivided structures instead of as flats or tenements. The dwellings shown, both for 1911 and 1921, include those occupied by non-private families (51,209 in 1921).

Let us now see how far the need for houses has been met since the war ceased. Various schemes have been initiated by successive Governments to encourage building, and the net result is as follows.—The total number of houses, having a rateable value not exceeding £78 (or £105 in the Metropolitan Police District), completed in England and Wales during the seven years ended 30th September 1926, was 755,087. Of these, 270,406 were completed by local authorities and 196,465 by private enterprise (including Public Utility Societies, &c.) with State assistance, while about 288,216 were completed by private enterprise without State assistance. Actually during the year ended 30th September 1926, 197,595 houses were completed, one-third of the total being due to private enterprise without State assistance.¹⁴ How does this compare with the rate of building before the war? During the years 1901 to 1914 the net annual increase in the number of dwellings in Great Britain was 101,685, almost entirely without State assistance.¹⁵ A recent writer, from whose book the above figures are quoted, taking into account wastage and demolition of houses and the increase of families, puts the need for houses still remaining at June 1926 as 275,578, and the annual need at 120,000. He estimates that if the present annual output of about 190,000 houses be maintained, it will only take until mid-1930 to attain to conditions better than those of 1911.¹⁶

III

POPULATION: DISTRIBUTION

IN the last chapter an attempt was made to answer the question how the population of this country lives. We now ask where the population lives. If the houses were equally distributed over the country there would be no need to put this second question. It is a familiar fact, however, that houses are not evenly distributed. There are dense aggregations of houses forming urban districts. If on a map of England and Wales the urban districts are somehow distinguished, the country looks like a vast archipelago, the urban districts standing out in the form of irregularly shaped islands in a sea of country. The study of distribution clearly involves a study of the extent to which the population of the country is living in these densely peopled areas. What percentage of the population, for instance, are town dwellers? But this is not all. A glance at such a map as that described above, shows that the islands are not equally distributed. In some parts of the country islands are few and far between; in others there is more dry land than sea. Therefore, in addition to studying the degree of urbanization, we have also to study the geographical distribution of urbanization.

The official distinction between urban and rural districts is based upon local government areas. Rural districts are those under rural district councils. In 1921 about 33 million acres of England and Wales were classed as rural and a little over 4 million acres as urban. There were on the average 7·2 persons per acre in urban districts and 0·2 persons per acre in rural districts.¹ It is not, however, the fact that people are so closely packed in urban areas that is remarkable; it lies in the very nature of towns to

be more crowded than the country. The remarkable feature of the position in England and Wales is the high proportion of persons who either from choice or necessity live in towns and the small proportion who live in the country. No less than 79·3 per cent. of the population of England and Wales in 1921 were living in urban areas.² To an extent that the world has never seen before, we are a nation of town dwellers. To the fact that the typical English household lives in its own separate house we can add the fact that this house is usually in a town. A small house in a large town, only too often ugly and smoke laden, is now the typical home of the Englishman.

This official method of distinguishing between town and country dwellers tends somewhat to exaggerate urbanization. Those living in small boroughs like Abingdon, for example, with a population of a little over 7,000 and surrounded on all sides by a wide belt of farm land, often regard themselves, and are regarded by others, as living in the country. Again, many persons who move out of some large town such as Liverpool and go to live within the area of an urban district council, that of Hoylake perhaps, regard themselves as having escaped from the town into the country. Evidently some further analysis of those officially regarded as town dwellers is required. Even if we could subtract from the official urban population all those not ordinarily regarded as town dwellers, the remaining urban population is urbanized in very different degrees. Clearly what we want to know is the total population living in towns of different sizes. This information is given in Table XVII.

Armed with figures such as these it is possible to read off the percentage which the urbanized part of the population forms of the whole, according to the definition of urbanization adopted. There are about 100 towns with a population of 50,000 and over, and if an aggregation of 50,000 is held to constitute urban conditions, then approximately one-half of the population is urbanized. Any definition must be arbitrary. It may be allowed,

TABLE XVII¹*Urbanization: England and Wales, 1921.*

<i>Area.</i>	<i>Number of Towns or Districts</i>	<i>Population (000's)</i>	<i>Per cent of Total Population</i>	<i>Cumulative Percentage</i>
<i>Large Towns</i>				
Population over 1,000,000 (London Admin. Co.)	1	4,485	11.9	11.9
" 500,000 & under 1,000,000	3	2,453	6.5	18.4
" 250,000 " " 500,000	8	2,737	7.2	25.6
" 100,000 " " 250,000	34	5,165	13.6	39.2
" 50,000 " " 100,000	55	3,855	10.2	49.4
<i>Small Towns and Urban Districts</i>				
Population under 50,000	1,025	11,341	29.9	79.3
<i>Rural Districts</i>	663	7,851	20.7	100.0
	1,789	37,887	100.0	100.0

perhaps, that those who live in towns of 100,000 and over are for the most part shut off from any continuous contact with country conditions. They pass their lives in man-made surroundings—the fields are no longer visible at either end of the main street. About 40 per cent. of the population live in 46 towns of this size and over; another 30 per cent. or so live in towns of a smaller size which number over 1,000; and the remaining odd 20 per cent. live in the country. This is possibly the most useful broad classification of urbanization that can be made.

Nothing has yet been said as to the geographical distribution of the population. It is common knowledge that certain parts of the country are agricultural and therefore sparsely populated, while other parts are industrial and therefore densely populated. It is easy enough to give illustrations, but difficult to discover any satisfactory method of representing the situation in the country as a whole. Some figures given in the census are of value in this connexion. In the census six principal industrial areas are distinguished, areas where industry and consequently population are concentrated. They are as follows:

- (1) Greater London or the City and Metropolitan Police Area.

- (2) Lancashire Area, comprising all Lancashire and some part of Cheshire together with a small fragment of Derbyshire.
- (3) Yorkshire Area, comprising the West Riding of Yorkshire together with the City of York.
- (4) North-east Coast, comprising the county of Durham and part of the North Riding of Yorkshire and part of Northumberland.
- (5) Birmingham and district, comprising parts of Staffordshire, Warwickshire, and Worcestershire.
- (6) South Wales, comprising Glamorganshire and parts of Monmouthshire, Brecknockshire, and Carmarthenshire.⁴

The population of these areas amounted in 1921 to the following totals :

<i>Area.</i>	<i>Population (000s).</i>		
	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
1 . .	3,464	4,016	7,480
2 . .	2,679	2,987	5,666
3 . .	1,568	1,697	3,265
4 . .	1,192	1,197	2,389
5 . .	961	1,036	1,997
6 . .	916	878	1,794
	10,780	11,811	22,591

The inhabitants of these areas form about sixty per cent. of the total population of England and Wales, and the areas together comprise about one-fifth of the surface. This affords a further illustration of the unequal distribution of population in this country. It would of course be easy to select different areas, the areas covered by the great towns only for instance, and to show that many millions live upon a tiny fraction of the surface. But this was not the object in view in selecting these areas. The object is to show where the great concentrations of population are found, and it will be observed that five out of the six chief industrial areas lie north of the line joining the mouths of the Severn and the Humber. The sixth area is London, and London is administrative and commercial rather than industrial.

The occupational type of the different areas is indicated in the following table:

TABLE XVIII *

Occupational Type of the Six Industrial Areas.

<i>Area.</i>	<i>Proportion per 1,000 Males over 12 Years of Age, occupied in</i>						
	<i>Agriculture</i>	<i>Coal-mining</i>	<i>Other Productive Occupns (Manufacture)</i>	<i>Metal Working.</i>	<i>Textile Working.</i>	<i>Transport.</i>	<i>Commerce.</i>
England & Wales	84	71	251	113	27	103	117
Greater London	16	—	216	80	2	143	179
Lancashire, &c.	30	52	332	122	97	118	127
West Riding and York	38	128	344	158	91	78	101
North-east Coast	25	237	257	171	1	82	81
Birmingham, &c.	20	30	452	339	3	76	104
South Wales	23	348	167	108	0	91	80

These six great industrial areas cover between them, as we have seen, only about a fifth of the area of England and Wales, and it is desirable to obtain a picture of the distribution of the population in the country as a whole. For this purpose reference may be made to what is known as 'regionalism'. Those interested in regionalism point out that the whole country tends to fall into regions or provinces. The six great industrial areas, for instance, are either regions in themselves or form the centres of regions. They further note that for administrative purposes government departments and unofficial national associations like trade unions do now divide the country into regions. The Board of Education and the Ministry of Labour have their regions or districts. Provincial universities agree as to the regions which they respectively serve, and there are some who even hope to see a reorganization of local government upon a regional basis. It is most unlikely that any such form of government will come about by a single act of creation. That is not how changes occur in this country. But recent developments such as the setting-up of joint town-

planning committees and other joint boards, suggest that a gradual reorganization of local government on regional lines is by no means improbable. With these programmes and these developments we are not here concerned. What do interest us are the attempts to divide the country into some dozen large regions, because they create more or less successfully just such a picture of the distribution of population as we are seeking.

A glance at the literature of regionalism makes it appear that there are two main schools of thought among those who have given attention to the matter. There are those who are moved chiefly by geographical considerations. They would like to discard the existing local government areas and redraw the boundaries so that they should lie along watersheds rather than cut across valleys. There are on the other hand those who attribute so much importance to the sentiments gathering round county and other existing divisions that they propose to base the regions primarily upon groupings of counties. The one school lays stress on physical and the other lays stress on human considerations. This is no place to discuss the respective merits of the different types of scheme, but, because of its simplicity for illustrative purposes, we may make use of the second principle to show how such a division of England and Wales might work out.

Any scheme founded upon county areas would no doubt involve some modification of those areas, because existing county divisions are often very inconvenient for administrative purposes ; but we need not concern ourselves with these complications. The following grouping of existing counties into eleven provinces or regions follows closely one of the suggested schemes. Names have been given to the provinces, possible capitals are indicated, and universities and university colleges falling within the boundaries of each province are shown. A column has been added showing also into which regions the six great industrial areas fall.

The table is intended merely to provide a picture

of the geographical distribution of the population. It is easy to criticize the choice of regions and the allocation of certain counties to particular regions, of Cumberland and Westmorland to Northumbria, for instance. It will be noticed that the areas of the regions do not differ as widely as their populations, which is another indication of the concentration of population in certain areas. Four regions are mainly agricultural and have relatively sparse populations. The most densely populated region is Lancastria, and the most sparsely populated region is North Wales.

TABLE XIX⁶
Regional Division of England and Wales.

<i>Province.</i>	<i>Area (ooo acres).</i>	<i>Popula- tion (ooo)</i>	<i>Capital (C) and Unrversity (U)</i>	<i>Counties</i>	<i>Industrial Area and Population (P) (1921 Census) (ooo)</i>	<i>Predominating Industries</i>
Northumbria	3,419	2,564	C. Newcastle U Durham	Northumberland Durham Cumberland Westmorland	North-east Coast, comprising Co. of Durham, & parts of Northumber- land & of North Riding of York- shire. P. 2,389	Coal-mining Shipbuilding Metals
Yorkshire	3,889	4,182	C Leeds U Leeds, Shef- field, & Hull	Yorkshire	West Riding of Yorkshire & City of York P. 3,265	Woollen Metals Coal-mining
Lancastria	1,853	5,953	C. Manchester U Manchester and Liver- pool	Lancashire Cheshire	Lancashire, part of Cheshire, and fragment of Derbyshire P. 5,666	Cotton Metals and Chemicals Coal-mining Transport
West Midlands	3,206	3,501	C Birmingham U Birmingham	Staffs Shropshire Herefordshire Warwickshire Worcestershire	B'gham & Dist., comprising parts of Staffs, War- wickshire, and Worcestershire. P. 1,997	Metals Pottery
West of England	4,383	2,254	C Bristol U Bristol and Exeter	Gloucestershire Somersetshire Devonshire Cornwall	—	Agriculture
Wessex	3,486	2,010	C Oxford U Oxford, Reading, & Southamp- ton	Dorset Hampshire Wiltshire Berkshire Oxfordshire	—	Agriculture

TABLE XIX (continued).

<i>Province.</i>	<i>Area (ooo acres).</i>	<i>Popula- tion (ooo).</i>	<i>Capital (C) and University (U).</i>	<i>Counties.</i>	<i>Industrial Area and Population (P) (1921 Census) (ooo).</i>	<i>Predominating Industries.</i>
Metropoli- tan	4,457	10,577	C.London U.London	London Middlesex Surrey, Kent Sussex, Herts. Bucks., Essex	Greater London or the Metropolitan Police Area. P. 7,480.	Commercial and Transport
East Midlands	2,459	2,218	C.Nottingham U.Nottingham	Notts., Derby Leicester Northants Rutland	—	Lace Hosiery Boots and Shoes China
Eastern Counties	5,059	1,971	C.Cambridge U.Cambridge	Norfolk, Suffolk Cambs., Hunts. Beds., Lincs.	—	Agriculture
North Wales	2,065	540	C. Carnarvon U.Bangor	Carnarvonshire Merionethshire Montgomery- shire Flintshire Denbighshire Anglesey	—	Agriculture Slate- quarrying
South Wales	3,065	2,116	C.Cardiff U.Cardiff, Swansea, & Aberystwyth	Radnorshire Cardiganshire Pembrokeshire Carmarthen- shire Glamorganshire Brecknockshire Monmouthshire	Glamorganshire and parts of Mon- mouthshire Brecknockshire and Carmarthen- shire. P. 1,794.	Coal-mining Tin-plates Agriculture

IV

POPULATION:

CLASSIFICATION BY INDUSTRY

IT is obvious that the immediate cause of the peculiar distribution of population sketched in the last chapter is to be sought in the distribution of industrial facilities. Men congregate in towns because they can find employment there. It would be beyond the scope of this book to discuss why opportunities for employment are localized. In a general way, however, it is clear that, whereas facilities for conducting certain industries, agriculture for instance, are scattered more or less uniformly over the whole country, the facilities required for most industries are of necessity localized in certain areas. The latter is clearly the case in regard to coal-mining. Again, industries not dependent upon bulky raw material tend to be localized in or near commercial centres. Distributive centres are found where there are good harbours or at inland nodal points. We are thus led to a discussion of the classification of the population by industry.

It is possible to classify men by the industry or by the occupation they follow. There is a distinction drawn by the census authorities between these two forms of classification. The difference is not merely technical: it is recognized also in everyday speech. We speak of accountancy as an occupation, but we recognize that accountants are to be found in most industries. Again, we speak of the mining industry, but we recognize that within it are to be found men following many occupations. But we encounter difficulties when we attempt to classify either industries or occupations, and some mention may first be made of these difficulties. We shall then be in a position to indicate the nature of the solution reached in relation to industrial classification and to discuss some

matters connected with the numbers employed in various industries—the subject-matter of this chapter.

It is not easy to arrive at any satisfactory system of classifying either industries or occupations. There are three main principles used to classify industries—classification by the material worked upon, by the product, and by the process. If we speak of the cotton industry we are using the first method, if we speak of the gas industry we are using the second, and if we speak of the building industry the third. We do in fact speak of the cotton industry, the gas industry, and the building industry, and we do thus habitually employ different methods of classification. It would not be possible to use one method only. Let us suppose that we adopted the method of classifying by the material worked upon. We should then be under the necessity of dividing up those engaged in building according as they worked with steel, brick, stone, or wood. This would mean that our method of classification was doing violence to facts. Similar difficulties would be encountered if we attempted to employ any other one method of classification.

Classifications should not do violence to facts, and since industries are constituted on different bases this fact should be recognized in our attempt to classify them. The system of classification adopted by the census authorities takes these considerations into account, as appears from an inspection of the tables which follow. In general the material worked upon is, in most countries, the determining factor in the early stages of manufacture, and the product in the later stages, while those industries which centre round a process are classified by the process. In this country, at the 1921 census, the industrial classification was based upon the product made or the service rendered by the employer, whereas for occupations the primary classification was by material worked in, with subdivisions according to the process. It is worthy of note that similarity in principle of classification does not involve similarity in detail, and unless this is borne in mind erroneous comparisons may be

made between one country and another. In some countries for instance, shipbuilding is included in the section Manufacture of Metals, Machines, and Implements, while in others it is included in Building.

Having settled the preliminary problem as to how industries and occupations should be classified, we are faced with the difficulty caused by the descriptions which people give of themselves when they fill in the census schedules. It is one thing to prepare a list of industries and another thing to allocate people to industries according to the information available. The information is often vague, and it may be far from clear to what industry or occupation the person filling up the schedule belongs. Some remarks by Dr. Schwarz-Lyon, quoted in the International Labour Office publication on *Systems of Classification*, illustrate this difficulty. 'Two individuals', he says, 'may both return themselves as joiner or turner or weaver, but in the one case the worker may be a highly skilled worker and in the other a semi-skilled or unskilled worker. . . . A worker may quite correctly describe himself or herself as an "embroidery worker", but the difference between hand and machine embroidery is as great as that between a monk who transcribes the Gospels and the machine operator who prints them.' These difficulties must be faced, and so far as possible every occupied person allocated to an industry and to an occupation.

In Table XX the total numbers of those engaged in each industry have been grouped under larger headings in order to give in summary form the results of classifying the occupied population by industry. All manufacturing industries, for instance, have been placed under one heading, and all extractive industries under another. For the most part the descriptive title given to each group indicates with sufficient clearness what industries are covered by the group. Commerce and finance, however, may be misleading. It may suggest mysterious, select, and lucrative occupations, whereas within this group are included, among others, all shopkeepers and dealers together with their assistants. Personal

TABLE XX.¹*England and Wales, 1921.*

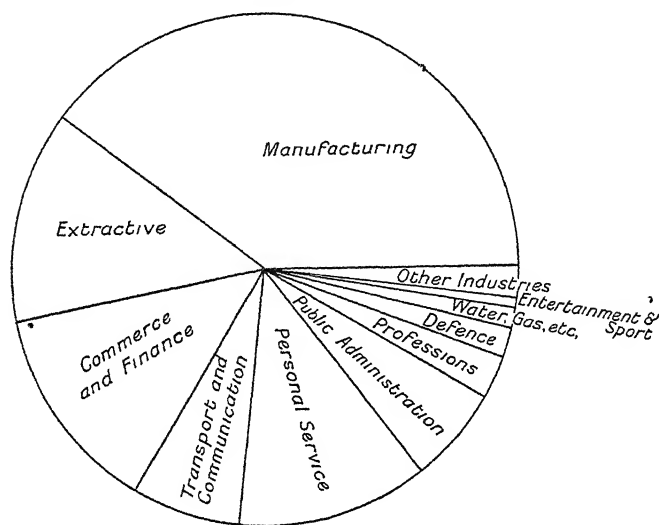
<i>Industries.</i>	<i>No so engaged (0000s).</i>	<i>Per cent of All Occupied Persons.</i>
Manufacturing of all kinds	6,733	39.2
Extractive (Agriculture, Fishing, Mining, and Quarrying)*	2,396	13.9
Commerce and Finance (including all types of Dealing)	2,275	13.2
Transport and Communication (of People, Goods, and Messages)	1,203	7.0
Personal Service (including Hotels and Catering, but not Govt and Local Authority)	2,047	11.9
Public Administration (Central and Local Govt)	1,042	6.1
Professions	515	3.0
Defence	294	1.7
Gas, Water, Electricity	163	1.0
Entertainments and Sport	122	0.7
Other Industries or Industry not stated	388	2.3
All Industries	17,178	100.0

*[Treatment of Non-Metalliferous Mine and Quarry Products has been included under Manufacturing]

service includes in addition to domestic servants, waiters and waitresses in restaurants, theatre attendants, and all others who in one way or another minister by personal attention to the wants of others. Those engaged in personal service are thus not by any means all retainers of the rich. The definition employed here of what constitutes a Profession is a wide one, and includes nurses and others who would be excluded by the adoption of a more rigid definition. If the term was used to include only those engaged in the highly skilled professions of medicine, law, architecture, accountancy, and others of similar grade, the professional group would drop to the bottom of the list.

Broadly it may be said, that out of every 100 occupied persons in the whole country, 53 were engaged in making and producing things: producing hay, corn and potatoes, sheep and oxen on the land; fishing for salmon, plaice, and herring in the sea; burrowing in the interior of the earth for coal and iron; fashioning wood and metal in workshops into machinery, furniture, and ornaments; weaving cotton and wool into fabrics in

the mills ; building houses, manufacturing clothes, boots, crockery, implements, toys, every imaginable and unimaginable thing. Twenty out of every 100 were engaged in buying and selling, whether wholesale or retail, and in moving, by road, rail, or water, all these things—when made or in the raw state—to warehouses, shops,



Occupied Population of England and Wales, 1921. Classification by Industry
(Areas proportionate to numbers in each industry)

and houses as required ; this group also includes all people concerned with finance and insurance. Twelve out of every 100 were told off to wait upon or prepare food, drink, and sometimes lodging for the other workers and for the idlers—in short, to provide for their bodily needs and comforts. Six out of every 100 were engaged in making and improving regulations under which the production and distribution of goods and services could be carried on in an orderly fashion, and in organizing other communal activities. Three out of every 100 were ministers, doctors, nurses, teachers, lawyers—all that group whose function it is to look after the health and the mental and moral welfare of the community. Two out of every 100 were enrolled for the defence of the State

against aggression, and one to maintain essential supplies of gas, water, and electricity.

It will not escape the notice of any one looking at Table XX that several of the headings indicate groupings which are not usually regarded as industrial. It is not usual to consider either Defence or Public Administration as an industry. But this table, it must be remembered, attempts to group the whole occupied population according to an industrial classification, whereas, in fact, only part of the occupied population is engaged in industry in the more usual and narrower sense of the term. Those engaged in Commerce and Finance, Personal Service, Public Administration, Professions, and Defence are not usually thought of as being

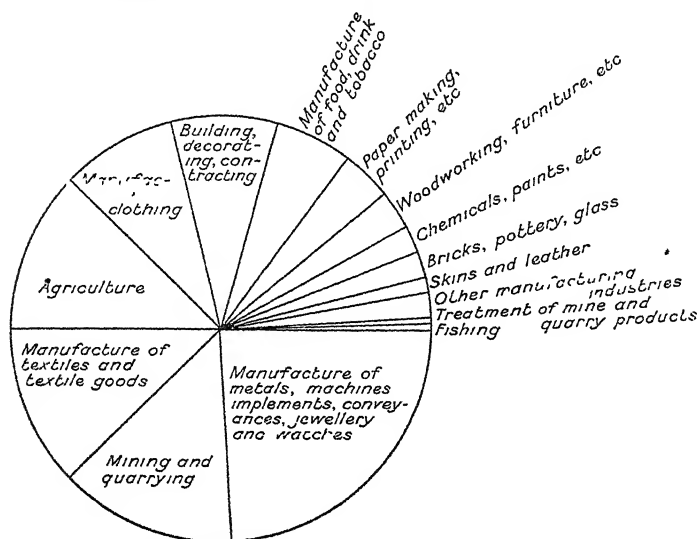
TABLE XXI.¹

England and Wales, 1921.

Extractive and Manufacturing Industries arranged in Order of Numerical Importance.

<i>Industries.</i>	<i>No. Employed (000s).</i>	<i>Per cent. of All Occupied.</i>
Manufacture of Metals, Machines, Implements, Conveyances; Jewellery and Watches . . .	2,196	12 8
Mining and Quarrying	1,232	7 2
Manufacture of Textiles and Textile Goods (not Dress); Cellulose	1,154	6 7
Agriculture	1,124	6 5
Manufacture of Clothing	806	4 7
Building, Decorating; Stone and Slate Cutting and Dressing; and Contracting	726	4 2
Manufacture of Food, Drink, and Tobacco . . .	541	3 1
Paper Making; Manufacture of Stationery and Requisites; Printing, Bookbinding, and Photo- graphy	357	7 9
Woodworking; Manufacture of Cane and Basket Ware; Furniture, Fittings	262	
Manufacture of Chemicals, Dyes, Explosives, Paints, Non-Mineral Oils, Grease	198	
Manufacture of Bricks, Pottery, Glass	176	
Preparation of Skins and Leather, Manufacture of Goods of Leather and Leather Substitutes (not Boots or Shoes)	80	
Other Manufacturing Industries	185	
Treatment of Non-Metalliferous Mine and Quarry Products	52	
Fishing	40	
All Combined	9,129	53 1

engaged in industry. Manufacturing and extracting are the typical industrial processes in the ordinary sense of the word. The question is often asked, What are our chief industries? The answer is given by taking the manufacturing and extractive groups and subdividing them without regard to the remaining 4.7 per cent. of the population who are not engaged in what is usually considered as industry.



England and Wales, 1921 Classification of Extractive and Manufacturing Industries. (Areas proportionate to numbers in each industry)

In Table XXI this analysis of the extractive and manufacturing industries has been made. The position of the agricultural industry is the most notable feature of the table. There was a time, not so very far distant, when it would have been thought remarkable if those engaged in agriculture did not outnumber those engaged in all other industries put together. When agriculture ceased to hold this position, it was for some time the most important industry. In 1851 about one in four of the occupied male population of England and Wales was engaged in agriculture. At the present day the proportion is about one in ten, and it comes last among the four great industries which employ a million workers

or more.² Regarding the other industries which appear in the list, perhaps the least expected feature is the relatively high place taken by the Paper-Making industry. It employs about a third as many persons again as Wood-working, and twice as many as the Manufacture of Bricks, Pottery, and Glass.

Too much importance, however, may be attributed to the place which an industry occupies in the list. If we write down in order of size the largest towns in England and Wales, we find Birmingham to be second, Liverpool third, and Manchester fourth. But the order is somewhat accidental—depending upon the suburbs which happen to be included at the time within the city boundaries. Similarly, the place occupied by any industry in Table XXI depends in part upon how the border-line workers are treated, whether they are included within it, allocated to another industry, or classed separately.

Classification by industry is, in fact, a very difficult matter and no wholly satisfactory solution can be expected. At each census the authorities responsible have to reconsider the basis of classification. They may make changes in order to improve the classification of industries which have been in existence for some time, and they may make changes in order to find a place for those engaged in new industries. These changes render comparison between the results of different censuses very difficult. Some important indications regarding the general trend of recent changes do, however, emerge. During the last forty years the relative importance of the extractive industries has declined somewhat. This change is due to the combined effect of a considerable decrease in Agriculture and a considerable increase in Coal-mining, resulting in a slight decline in the balance. The total employed in Agriculture has fallen absolutely as well as relatively, whereas the position in Coal-mining is the other way about. The number employed in Coal-mining in Great Britain has risen in forty years from 500,000 to 1,300,000, and the proportion per 10,000 occupied persons has increased from nearly 400 to

nearly 700.³ It would be a safe prophecy that no census will ever again show so high a proportion of coal-miners as did that of 1921. Coming to the manufacturing industries the most remarkable change has been the advance in the importance of the industry of the Manufacture of Metals, Machines, Implements, and Conveyances. The number employed in Great Britain has risen from over 900,000 to close upon 2,500,000, and the proportion has increased from over 700 to nearly 1,300 per 10,000 occupied persons.³ The Textile industry shows no expansion in numbers and, since the number of occupied persons as a whole has increased with the growth of the population, its relative importance must have declined. Comparative figures for the important industries of the Manufacture of Clothing and of Building, Decorating, and Contracting are available only since 1901, and are for England and Wales alone. Both industries show an absolute as well as a relative decline. The decline in Building, &c., is worthy of notice. The total number has fallen from about 1,000,000 in 1901 to about 700,000 in 1921, whilst the proportion per 10,000 occupied persons has fallen from over 700 to under 450.⁴

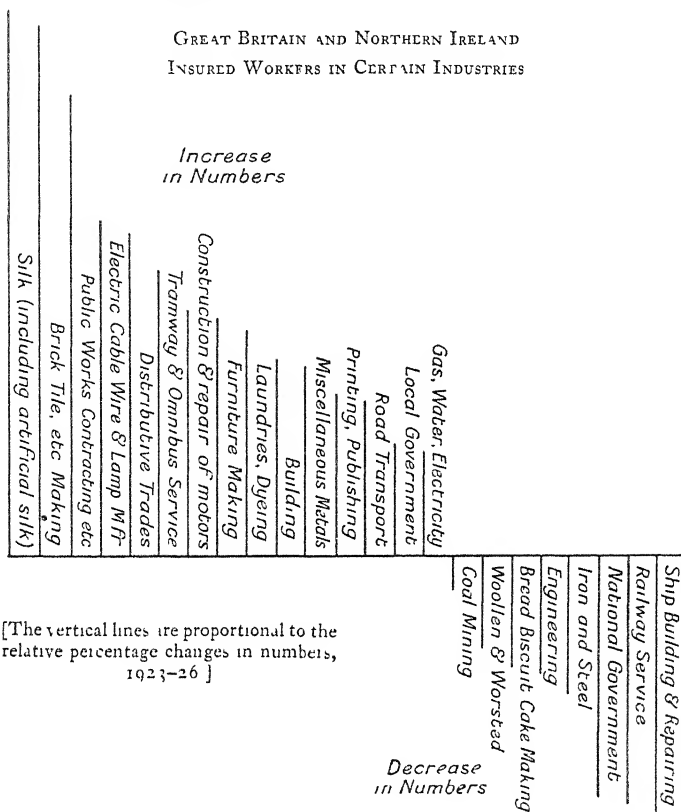
The extent and direction of more recent changes will not be fully known until the results of the next census are published, but some figures have recently been given in the *Labour Gazette* which, though not comparable with those quoted above, provide an indication of the changes in progress since the census, or, to be precise, between July 1923 and July 1926. The number of persons insured against unemployment in various industries has been estimated for July of the last four years. The percentage increases and decreases which the 1926 figures show as compared with the 1923 figures in these industries, can thus be calculated. The following table includes those in which the greatest change has occurred. It will be seen that the older staple industries generally exhibit decreases, whereas the newer industries show big increases.

TABLE XXII⁶

Table showing Changes between July 1923 and July 1926 in the Total Estimated Numbers of Insured Workpeople in Certain Industries in Great Britain and Northern Ireland.

<i>Industry</i>	<i>Increase or Decrease in Number, July 1923—July 1926.</i>	<i>Percentage Increase or Decrease between 1923 and 1926</i>
Silk (including Artificial Silk)	+ 13,420	+ 35.5
Brick, Tile, &c., Making	+ 21,610	+ 35.2
Public Works, Contracting, &c.	+ 37,550	+ 29.7
Electric Cable, Wire and Electric Lamp Manufacture	+ 15,710	+ 21.7
Distributive Trades	+ 260,850	+ 20.9
Tramway and Omnibus Service	+ 20,340	+ 18.6
Construction and Repair of Motor Vehicles, Cycles, Aircraft	+ 31,340	+ 16.3
Furniture Making, Upholstering	+ 14,310	+ 15.3
Laundries, Dyeing, Dry Cleaning	+ 15,630	+ 14.7
Building	+ 90,040	+ 12.7
Miscellaneous Metal Industries	+ 20,420	+ 12.3
Printing, Publishing, Bookbinding	+ 23,550	+ 10.3
Road Transport other than Tramway and Omnibus	+ 14,700	+ 10.1
Local Government	+ 17,250	+ 7.2
Gas, Water, Electricity Supply	+ 11,180	+ 6.4
Coal-mining	— 28,130	— 2.2
Woollen and Worsted	— 16,250	— 6.0
Bread, Biscuit, Cake Making	— 11,870	— 7.5
General Engineering	— 53,080	— 7.9
Steel Melting and Iron Puddling Furnaces, Iron and Steel Rolling Mills and Forges	— 18,850	— 8.9
National Government	— 28,130	— 15.7
Railway Service (non-permanent workers)	— 30,450	— 15.9
Shipbuilding and Ship repairing	— 46,080	— 17.1

It has been said that a new industrial revolution is in progress, and the figures given above tend to bear out the statement. A process of adaptation to post-war conditions is taking place and industries better suited to the needs of the time are growing up, whereas cotton, coal, shipbuilding, and the heavy metal industries are showing signs of decline. These changes in the nature of our industry are apparently being accompanied by changes in geographical distribution. The industries showing decline are mostly north of the line joining the Severn and the Humber, whereas the newer industries are often situated in the south. It is not at present



possible to measure the extent of this new distribution, but it has been frequently commented upon of late, and among others by the Chief Inspector of Factories and Workshops in his report for 1925.⁶ At the same time that these geographical changes due to the location of the newer industries in the south are taking place, coal-mining is tending also to move south, to Kent for instance, thus emphasizing the redistribution of industry.

With the results before us of attempting to make an industrial classification of the population in 1921, we were led to ask in what directions the position had changed. Let us now return to the 1921 classification.

There are certain matters of interest to which no reference has yet been made. It seems very improbable that every industry employs the same proportion of young and old. We should all expect the average age of lodging-house keepers, for instance, to be relatively advanced. Let us put this matter to the test. Table XXIII includes all industries in which more than 100,000 males were employed in 1921, and gives the percentage of male employees of each industry between the ages of 12 and 25, 25 and 55, and 55 and over. Table XXIV includes all industries in which more than 100,000 females were employed, and makes a similar classification.

TABLE XXIII¹

Industries according to Age.
(*England and Wales, 1921.*)

<i>Industries with over 100,000 Males.</i>	<i>Total Employed (000s).</i>		<i>Percentage (of Males) between Ages</i>		
	<i>M.</i>	<i>F.</i>	<i>12-25</i>	<i>25-55</i>	<i>55 & over</i>
All Industries	12,113	5,065	26.4	58.4	15.2
Mfr. of Self-propelled Vehicles (not steam) and Cycles	183	16	35	59	6
Dealing in Grocery and Provisions (Retail)	146	79	35	52	13
'Other' Engineering (not Marine or Electrical)	259	21	33	56	11
Cotton Weaving	133	245	32	54	14
Coal Mines (including all Minerals therefrom)	1,126	6	32	57	11
Shipbuilding and Repairing and Marine Engineering	278	5	29	58	13
Departmental Stores and General and Mixed Businesses	117	73	29	58	13
Farming (not Fruit or Poultry) and Stock Rearing	899	67	29	50	21
Steel Works and Rolling Mills	147	4	27	60	12
Cartage and Haulage Contracting	126	3	26	61	13
Shipping (excl'dg. those in Yards and Marine Engineering Shops)	157	8	25	63	12
Mfr. of Boots, Shoes, & Slippers (not Rubber)	143	52	26	55	19
Rly Transport (excl'dg. those employed in Rly Co.'s Works, Docks, Shipping, Hotels, &c.)	531	17	24	63	13

TABLE XXIII (*continued*)

<i>Industries with over 100,000 Males.</i>	<i>Total Employed (000s)</i>		<i>Percentage (of Males) between Ages</i>		
	<i>M</i>	<i>F</i>	<i>12-25</i>	<i>25-55</i>	<i>55 & over</i>
All Industries	12,113	5,065	26.4	58.4	15.2
Tailoring (inclg Waterproof and Leather Clothing)	126	162	23	60	17
Private Domestic Service (In- and Outdoor)	227	1,005	21	54	25
'Other' Govt. Depts (exclg Educn., Govt. Factories, &c)	114	45	20	69	11
Post Office	133	56	19	72	9
Building and Contracting	712	9	19	63	18
Gas Works	100	3	16	67	17
Hotels, Inns, Public Houses, and Beer Houses	127	113	15	64	21
'Other' Local Govt (exclg Police, Poor Law, Educn., Tramways, Gas, Water Services, &c)	300	52	12	63	25

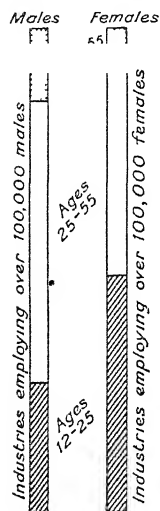
TABLE XXIV.

Industries according to Age.
(*England and Wales, 1921.*)

<i>Industries with over 100,000 Females.</i>	<i>Total Employed (000s)</i>		<i>Percentage (of Females) between Ages</i>		
	<i>F.</i>	<i>M.</i>	<i>12-25</i>	<i>25-55</i>	<i>55 & over</i>
All Industries	5,065	12,113	48.4	43.1	8.5
Cotton Carding, Spinning, Doubling, & Thread Mills	117	92	59	38	3
Tailoring (inclg Waterproof & Leather Clothing)	162	126	56	39	5
Dealing in Drapery, Hosiery, Haberdashery, Hats, and Millinery (Retail)	165	86	51	41	5
Private Domestic Service (In- and Outdoor)	1,005	227	48	43	9
Cotton Weaving	245	133	40	50	4
Laundries, Job Dyeing, and Dry Cleaning	103	22	41	45	14
Dress and Blouse Making	146	4	40	50	10
Hotels, Inns, Public Houses, and Beer Houses	113	127	32	56	12
Education (Local Authority)	161	63	23	70	7
Lodging & Boarding Houses	136	14	12	50	38

A comparison of the two tables brings out the marked contrast as between men and women in industry regarded from the point of view of age. In seven out of

the ten chief women-employing industries 40 per cent. or more of the women are between 12 and 25. In none of the twenty-one chief male-employing industries are more than 35 per cent. of the employees in the lowest age group. The explanation is obvious: women leave industry as a rule when they marry. Table XXIV



does not contain any surprises. Our suspicion as to the age of lodging-house keepers is confirmed. Table XXIII contains many points of interest. The new industry of the Manufacture of Motor Vehicles contains a large percentage of young men and a small percentage of old men. Retail Dealing attracts the young but has less place than most industries for the middle-aged. The Postal Service is pre-eminently the occupation for the middle-aged. There are striking differences between industries in respect of the percentage of males over 55 whom they employ. Farming holds a high place; it is in fact the highest place if we disregard those industries which

demand little or no physical activity. It may be called an honourable place, because the retention of the older men is in large measure due to the dislike of turning off an old employee even when he is getting past his work. Farmers are often blamed for paying low wages; it should be remembered that in spite of seasonal slackness in the industry they do not turn men off and re-engage them to any large extent, and that they do not shed their elderly men as soon as they begin to fail.

It is a matter of common knowledge that some industries are chiefly male employing and others chiefly female employing. Table XXV sets out the position. In it the industries employing more than 100,000 of either sex are rearranged in order of importance from this point of view. An industry which employs over

100,000 of each sex appears in the male list if males preponderate and in the female list if females outnumber males. The most significant fact is that nine out of ten of the female-employing industries are connected either with the manufacture, cleaning, and sale of clothing, or with some form of personal service.

TABLE XXV⁷

Industries according to Sex (England and Wales), 1921.

<i>Industries with over 100,000 Males</i>	<i>M</i> (000s)	<i>F</i> (000s)
Coal Mines (including All Minerals therefrom)	1,126	6 41
Farming (not Fruit or Poultry) and Stock Rearing	899	66 7
Building and Contracting	712	8 83
Rly Transport (excluding those employed in Rly Co's Works, Docks, Shipping, Hotels, &c)	531	17 2
'Other' Local Govt (excluding Police, Poor Law, Education, Trams, Gas, Water, and similar undertakings)	300	51 6
Shipbuilding and Repairing and Marine Engineering	278	5 10
'Other' Engineering (not Marine or Electrical)	259	20 9
Mfr of Self-propelled Vehicles (not steam) and Cycles	183	16 0
Shipping (excluding those in Yards and Marine Engineering Shops)	157	7 50
Army (including War Office)	148	5 77
Steel Works and Rolling Mills	147	3 60
Dealing in Grocery and Provisions (Retail)	146	78 6
Mfr of Boots, Shoes, Slippers (not Rubber)	143	52 1
Post Office	133	56 1
Hotels, Inns, Public and Beer Houses	127	113
Cartage and Haulage Contracting	126	2 95
Departmental Stores, General and Mixed Businesses	117	73 2
'Other' Govt Dept. (excluding Education, Government Factories, &c)	114	44 8
Navy (including Admiralty)	109	2 33
Gas Works	100	2 80

<i>Industries with over 100,000 Females</i>	<i>F</i> (000s)	<i>M</i> (000s)
Private Domestic Service (Indoor and Outdoor)	1,005	227
Cotton Weaving	245	133
Dealing in Drapery, Hosiery, Haberdashery, Hats, and Millinery (Retail)	105	85 5
Tailoring (including Waterproof and Leather Clothing)	102	120
Education (Local Authority)	161	63 4
Dress and Blouse Making	140	4 12
Lodging and Boarding Houses	130	13 7
Cotton Carding, Spinning, Doubling, and Thread Mills	117	92 5
Laundries, Job Dyeing, and Dry Cleaning	103	21 8

POPULATION:

CLASSIFICATION BY OCCUPATION

THE occupation which a man follows is of more immediate importance to him than the industry in which he is engaged. It does matter much to a man that he is a clerk ; it matters less to him whether he is a clerk in a shipping firm or in a wholesale merchant's office. Our next task is therefore to classify by the occupations which they follow those same persons whom in the last chapter we classified by the industries in which they are engaged.

Who are these persons? They are those who are technically known as the 'gainfully occupied', or in short as the 'occupied'. Now it is possible to be unemployed yet 'occupied', and to be very fully employed yet 'unoccupied'. This is so because the term 'occupied' is used by the census authorities in a special sense. The 'occupied' are in fact both the gainfully occupied and the would-be gainfully occupied. Married women, therefore, who are occupied but not gainfully so, are excluded. On the other hand, the unemployed who want employment are included. Let us now attempt to classify the 'occupied' by their occupations, leaving until later the question as to who the unoccupied, as distinguished from the unemployed, may be.

Something was said in the last chapter regarding the difficulties encountered when classifying either by industry or occupations, and these difficulties need not detain us further.

Using the census records, a broad classification of occupations has been made in Table XXVI for comparison with Table XX of Chapter IV, practically the same headings being retained with one or two additions. It is surprising

TABLE XXVI¹*Occupations—England and Wales, 1921.*

	<i>No. engaged</i> (000)	<i>Per cent of all Occupied Persons</i>
Manufactures of all kinds	6,008	35.0
Extractive (Agriculture, Fishing, Mining, and Quarrying)	2,349	13.7
Commerce and Finance (including Shop Assistants, excluding Clerks)	1,559	9.1
Transport and Communication	1,484	8.6
Warehousemen, Storekeepers, Packers	351	2.0
Personal Service	2,016	11.7
Public Administration	309	1.8
Professional	667	3.9
Defence	205	1.2
Gas, Water, Electricity	49	0.3
Entertainments and Sport	95	0.6
Clerks and Draughtsmen, Typists (not Civil Service or Local Authority)	998	5.8
Other and Undefined	1,088	6.3
All Occupations	17,178	100.0

to find how little an occupational classification differs from an industrial classification. There are differences, but they are of no great magnitude. The occupational groups of Extraction and Manufacture have lower totals than the industrial groups of the same designation. This is so because some of those engaged in the extractive and manufacturing industries are not in fact occupied in extraction or manufacture and in consequence they appear under some other occupational heading, that of Clerks or Transport workers, for example. With regard to Transport and Communication it is the other way about. The occupational total is larger than the industrial total, because the carters, lorry drivers, and other transport workers engaged in various industries have been transferred to the Transport and Communication group in the occupational classification.

The figures show that from the occupational point of view Manufacture is predominant, but it is to be understood that the term is used in a wide sense; to include, for instance, the building of houses. One out of every three occupied persons is occupied with manufacture. Occupations connected with Extraction take second place, but they are a poor second. Extraction

and Manufacture together employ about half the occupied population. The Clerical group accounts for about one person in every seventeen of the total occupied. But this does not give full weight to the importance of this group, because clerical workers in Central and Local Government service are included under the heading Public Administration. If they are added to the Clerical group we find that one occupied person in every fifteen is a clerical worker.² This fact, and the predominance of Manufacture as compared with Extraction, constitute perhaps the most remarkable features of our industrial civilization.

Many other questions will readily suggest themselves, and to some of them an answer can either be found in or deduced from the census returns. It may be asked what percentage of workers are skilled. This question, however, has no application to certain occupations. It is not usual to think of those occupied in retail dealing as divided into skilled, semi-skilled, and unskilled. In any case, if we do so apply these adjectives, they bear quite a different significance to that usually associated with them. It is, in fact, to those engaged in extractive and manufacturing occupations that these terms are normally applied. Opinions differ so much as to how agricultural occupations should be graded that it is best to omit them from consideration.

Taking into account therefore manufacturing occupations, and among extractive occupations only mining and quarrying, we find that those included in the census are divided into four chief groups. There is, first, the group of owners, agents, and managers, and secondly, that of foremen and the remainder of the subordinate superintending staff. Thirdly, there is the group of skilled workers distinguished into various classes and into a residual class of 'other skilled workers' not so distinguished. Finally, there is the group of 'other workers'. These 'other workers' do not follow any skilled calling, and we may regard them as unskilled. The distinction between skilled and unskilled is a difficult distinction to draw. The census recognizes no semi-

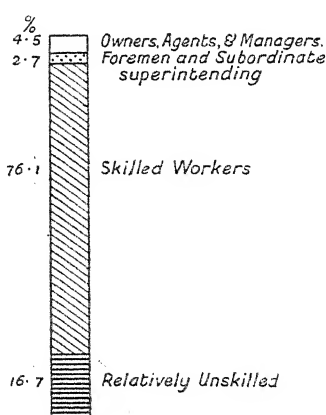
skilled class. But the distinction has been made with great care after consultation with trade-union officials and other persons with expert knowledge. Therefore the figures have considerable weight, and it appears from the following table that, if the first two groups are omitted and the wage-earners alone are considered, about 80 per cent. are skilled. Perhaps it would represent the facts more accurately to say that about 20 per cent. are unskilled and the remainder more or less skilled. The proportion of unskilled is higher in Mining and Quarrying than in the Manufacturing occupations.

TABLE XXVII.¹
England and Wales, 1921.

Division of Workers into Directing and Subordinate Staff, Skilled, and Unskilled.

Status or Grade.	Manufacturing Industries.		Mining and Quarrying.	
	No. (000s).	Percentage.	No. (000s).	Percentage.
Owners, Agents, and Managers	270	4.5	8	0.8
Foremen and Subordinate Superintending Staff	164	2.7	43	4.0
Skilled Workers	4,572	76.1	783	73.5
Other Workers, relatively Unskilled	1,002	16.7	231	21.7
Total	6,008	100.0	1,065	100.0

The division into skilled and unskilled has no relevance, as we have seen, in relation to dealing. It is possible, however, to divide the two and a half million persons occupied in Commerce, Finance, Insurance, and Clerical Work (not Civil Service or Local Authority) in such a manner as to show the proportions occupied in: (1) managing; (2) buying, advertising, and canvassing; (3)



selling; and (4) clerical work. This has been done in Table XXVIII. That Class I should form nearly a quarter of the total is somewhat remarkable. The explanation is that it includes all managing shopkeepers. It is nevertheless surprising that the salesmen group should not be relatively larger. The great retail establishments

TABLE XXVIII¹

Occupational Description of Persons engaged in Commercial, Finance, Insurance, and Clerical (not Civil Service or Local Authority) Occupations.

<i>Broad Description</i>	<i>Detailed Description</i>	<i>Number of Persons (000s).</i>	<i>Per cent. of Total</i>
Managing and Directing	<i>Commercial.</i> Proprietors, Managing Directors, Managers of Wholesale or Retail Businesses	542	23.9
	<i>Finance and Insurance.</i> Company Directors, Bankers, Bank Officials (Heads of Depts., Managers, Inspectors), Insurance Officials (Ditto)	31	
	<i>Secretarial.</i> Company Secretaries and Registrars, Heads or Managers of Commercial Office Depts.	32	
Buying, Canvassing, and Advertising	<i>Commercial.</i> Brokers, Agents, Factors, Buyers, Travelers, Canvassers, Advertising Agents	143	7.6
	<i>Finance and Insurance.</i> Stock Brokers and Jobbers, Insurance Agents and Brokers, Canvassers	49	
Selling in Shops and Otherwise	<i>Commercial.</i> Salesmen and Shop Assistants, Roundsmen and Van Salesmen, Costermongers and Hawkers, Newspaper Sellers	757	30.0
Clerical	<i>Clerical.</i> Costing and Estimating Clerks, Other Clerks*	934	37.0
Miscellaneous Unclassified	<i>Commercial.</i> Other Occupations	16	1.5
	<i>Finance and Insurance.</i> Auctioneers, Appraisers, Valuers, Money Lenders and Pawnbrokers, Other Occupations	22	
Total		2,526	100.0

* This class probably includes a considerable but unknown number of clerks and typists who do not properly come under the head of Commercial, Finance, or Insurance.

with their huge staffs of salesmen presumably make so much of an impression on the mind that the multitude of small shops is forgotten.

We may also inquire what proportion of those occupied work indoors, and what proportion are outdoor workers. It is also of interest to ask how far male and female occupations differ in this respect. To these questions the census provides no direct answers. But it is possible to go through the occupational classes given in the census and to attempt to allocate them in every case either to the indoor or outdoor group. This procedure meets with difficulties. Some occupations such as painting and decorating, coal and shale mining, are partly indoor and partly outdoor, or indefinite. Therefore it seems necessary to set up a mixed group. We get the following result:

TABLE XXIX¹
Indoor and Outdoor Occupations.

	No. of Persons (000s)					
	M	%	F.	%	Total	%
<i>Indoor</i>	5,642	46.6	4,805	95.0	10,447	60.7
<i>Outdoor</i>	3,739	30.9	148	2.9	3,887	22.6
<i>Mixed or Indefinite</i>	2,732	22.6	112	2.2	2,844	16.5
Total	12,113	100.0	5,065	100.0	17,178	100.0

Too much stress must not be laid upon the results of this attempt. Taking it for what it is worth, two facts stand out. First, about three out of every four occupied persons follow an indoor calling. To work mainly indoors is a distinctive mark of modern conditions. It might be possible to advance the theory that the approach to modern conditions could be measured by the decreasing percentage which outdoor workers form of the whole. Secondly, the occupations followed by women are almost wholly indoor. It is not the case that women's occupations have always been, or are in all countries at the present day, principally indoor. In this country, women were formerly occupied in considerable numbers with agriculture, and are still so occupied in many countries.

In this country, male occupations are not so preponderantly indoor, and in so far as they are indoor they are not necessarily light. The work of blast furnace men is indoor and counts among the heaviest type of work. Whether work is light or heavy the fact that three out of four workers do not work in the open air shows the great importance of the attempts now being made to mitigate the accompanying loss of ventilation and sunlight.

There is another aspect of occupations upon which some light is thrown by the census. We sometimes hear of 'hordes of officials'. After the war, attempts were made to rouse our animosity against 'limpets'. At the present time those of one school of thought welcome the taking of men out of the service of private enterprise and the placing of them in Government employment, while those of the opposite school of thought deplore the increasing pay roll of Government servants and look forward gloomily to the time when we shall all wear parish uniform. One characteristic is shared by many in each camp, and that is a remarkable vagueness as to the number of Government servants to-day and as to the proportion which they form of the total occupied population. A service can perhaps be rendered by abstracting this number from the census returns and thus enabling the controversialists to start from a common basis of fact. The word Government will be taken of course to cover both Central and Local Government. The bare facts are easily stated. There were in 1921

TABLE XXX.¹

(A) <i>Employed by the Central Government.</i>					
(000s)					
619	Males,	or	5 1 ⁹ / ₁₀	of All Occupied Males	
115	Females,	2 3	"	"	Females.
734	Persons,	4 3	"	"	Persons.
(B) <i>Employed by Local Authorities.</i>					
(000s)					
015	Males,	or	5 1 ⁹ / ₁₀	of All Occupied Males.	
248	Females,	4 9	"	"	Females
863	Persons,	5 0	"	"	Persons.

just over a million and a half persons employed by the Central Government and Local Authorities. In other words, 9.3 per cent. of all occupied persons were so employed. A summary of the position, distinguishing the sexes, is given in Table XXX.

These totals are of some interest because Government servants, however diverse their occupations, have this in common, that they are not under the direction of private employers. Apart from independent persons who are working on their own account, are these Government servants the only occupied persons who are not employed by private enterprise? Waiving the question as to whether some distinction should not be drawn between those forms of private enterprise, such as certain water companies, which operate under strict Government control and pay limited dividends, and 'free' private enterprise, there are the employees of consumers' co-operative societies to be considered. In 1921 they numbered 187,979: 78,571 being engaged in production and 109,408 in distribution.⁵ This form of enterprise does depart from ordinary private enterprise in certain important particulars, and when a classification into servants of the Government and servants of private enterprise is made, they should perhaps be placed in a class apart.

Returning now to the figures given above, unless they are further analysed they may be very misleading, because Government service is a very wide term, taking in not only administrative officials, but also all who are enlisted in the fighting services, post office workers, elementary school teachers, those employed by local authorities in gas, water, and electricity works and on tramways, and others. Now it may be observed that those who welcome the extension of Government employment do not welcome it in all forms, and those who deplore its extension do not deplore it in all forms. For instance, it would appear in general that those who welcome an increase in the number of those employed in municipal services dislike any addition to the fighting

services, and vice versa. Therefore an all-round increase or decrease in the number of Government servants will not as such be a source of unqualified satisfaction to any school of thought. Hence the necessity for a more detailed analysis of Government employment. • Such an analysis is presented in Table XXXI.

TABLE XXXI

Detailed Analysis of Persons employed in Government Service.

<i>Central Government</i>			<i>Local Government</i>		
	(000s) <i>M</i>	(000s) <i>L</i>		(000s) <i>M</i>	(000s) <i>F</i>
Army and War Office	148	5 8	Tramway and Bus Service	60	1 8
Navy and Admiralty	109	2 3	Harbour, Docks, &c	42	0 8
Air Force and Ministry	28	1 1	Gas Works	27	0 5
Marine Engineering & Shipbuilding	49	0 8	Water Works	16	0 3
Engineering (not Marine)	17	0 8	Electricity Supply	22	0 5
Munition and Aero-plane Factories	9	0 9	Others	3	0 1
Others	8	2 0	Total of the Above	170	4 0
Total of the Above	368	13 7	Police	63	1 5
Post Office	133	56 1	Poor Law	19	29 8
Education	3	0 7	Education	63	161 0
Others*	115	44 8	Others*	300	51 6
Total	619	115	Total	615	248

(* Includes Civil Service Officials and Clerks)

(* Includes Local Authority Officials and Clerks)

It appears that nearly 400,000 persons employed by the Central Government are either enlisted in the fighting services or are engaged directly or indirectly in the manufacture of war material. These persons are therefore to be distinguished from other Government servants. Those who welcome the extension of Government service generally have in mind these other Government servants. We set out to discover the hordes of officials who suffer almost universal execration, and it behoves us at this stage to ask how far the figures we have given are relevant to the question at issue. It seems clear that postmen, school teachers, policemen, employees in municipal water, gas, and electricity works, are not usually regarded as officials. The term has no well understood significance, but it

seems generally to be applied to administrators. Therefore it may be of interest to give the figures from the census showing the number of 'Officials and Clerks' in the service of the Central and Local Government engaged in public administration. They number just under a quarter of a million and account for 1.4 per cent. of all occupied persons. It is for others to decide whether this is an excessive number for the work that has to be done.

TABLE XXXII "

Number of Persons engaged in Public Administration.

(A)									
(0000)									
118	Male	Civil Service Officials and Clerks,	9	8	per	1,000	of	All Occupied	Males
55	Female	" " " " " "	11	0	"	"	"	"	Females.
173	Persons,	" " " " " "	10	1	"	"	"	"	Persons
(B)									
59	Male	Local Authority	"	"	"	4	9	"	Males.
16	Female	" " " " " "	"	"	"	3	2	"	Females.
75	Persons,	" " " " " "	"	"	"	4	4	"	Persons.
(A & B) Total Number of Officials and Clerks = 248,000,									
14.4 per 1,000 of All Occupied Persons									

Before passing on to ask who are the unoccupied, reference may be made to a most interesting calculation due to Mr. Cyril Burt and revised later by him with the assistance of Miss Spielman.⁷ In fairness to Mr. Burt it should be said that he regards his results as purely tentative. Occupations were classed into eight groups in descending order, according to the intellectual attainments necessary if the duties involved were to be adequately performed. Thus for occupations placed in Group I it was judged that higher intellectual qualifications are required than for those allocated to Group II. As kindly described in a letter to us, the occupations given in the census were considered in turn and placed each in its appropriate group after very careful inquiry as to the work involved. It was in a few cases found necessary to split up the number grouped together in the census returns because some in certain groups

were doing work which required greater attainments than those demanded of others in the same group. The inquiry was limited to male adults, and when the allocation of occupations to their several groups was completed, it was easy to ascertain from the census the number of persons falling within each group and to calculate the percentage which the number in each group formed of the whole number of occupied male adults, as follows:

TABLE XXXIII

Occupations of Male Adults classified according to Intellectual Requirements.

<i>Occupational Group.</i>		<i>Percentage of all Occupied Male Adults.</i>
	Highest Professional Work (lawyers, doctors, higher administrative posts in State or business, University teachers)	0 1
2	Lower Professional and Technical Work (elementary teachers—clerks holding higher posts)	3 0
3	Clerical and Highly Skilled (clerks of lower grade and highly skilled labour)	12 0
4	Skilled Labour and Minor Commercial Posts (small tradespeople—shop assistants)	26 0
5	Semi-skilled Labour and Poorest Commercial Positions	33 0
6	Unskilled Labour and Coarse Manual Work	19 0
7	Casual Labour	7 0
8	Institutional Cases	0 2

This table should be read as showing that 3 per cent. of all occupied male adults were judged to be following occupations demanding what might be called second-grade intellectual attainments. They may actually not have possessed these attainments or they may have possessed greater attainments than were required. The above table, for what it is worth,—and its author attaches no great weight to it—points to the fact that a very small percentage of posts demand high intellectual attainments.

Who are the unoccupied? In round numbers half the population is unoccupied in the technical sense. We may consider the sexes separately. No male under twelve years of age is 'occupied'. If we subtract the total number of occupied males from the total number of males over twelve, we have about $1\frac{3}{4}$ million

persons to account for.⁸ Of them, 78 per cent. are shown in the census to be retired from some previous occupation, to be attending full-time educational courses, or to be engaged in some occupation outside the United Kingdom. This leaves about 390,000 persons still unaccounted for. Some of them are no doubt idle and some rich, and a small proportion both idle and rich. But no data are available for an analysis. There can be little doubt that the number of idle rich is smaller than often supposed, though this is of course no defence of their existence. The analysis of the unoccupied, so far as it can be carried, is given in the table below:

TABLE XXXIV⁹*Persons classed in the Census as Retired or Not Gainfully Occupied*

<i>Males.</i>	<i>Number (000s.)</i>	<i>Per cent of Total</i>
Retired from Previous Gainful Occupation (not Naval or Military)	392	21.9
Ex-Commissioned Officers, Ex-Other Ranks and Ratings (Naval or Military)	58	3.2
Persons attending Educational Institutions full time, aged 12 years and over	931	52.0
Persons Occupied outside the United Kingdom	17	1.0
Others, Not Retired and Not Gainfully Occupied	390	21.8
	<hr/> 1,788	<hr/> 100.0

<i>Females (Single, Widowed, or Divorced).</i>	<i>Number (000s.)</i>	<i>Per cent of Total</i>
Retired from Previous Gainful Occupation	65	1.7
Persons attending Educational Institutions full time, aged 12 years and over (including those who are married)	912	24.4
Persons Occupied outside the United Kingdom	3	0.1
Others, Not Retired and Not Gainfully Occupied	2,758	73.8
	<hr/> 3,738	<hr/> 100.0

Of all Males, aged 12 years and over, the proportion Not Retired and Not Gainfully Occupied = 2.8 per cent.*

Of all Females, aged 12 years and over, who are Single, Widowed, or Divorced, the proportion Not Retired and Not Gainfully Occupied = 34 per cent.¹⁰

When we turn our attention to the other sex we can omit both those under twelve and those who are married. They are technically unoccupied, but for the most part, if of school age or over, very fully employed. This

leaves us with about $3\frac{3}{4}$ million single, divorced, or widowed females over twelve. We can account for about a million, as seen in the table, leaving about $2\frac{3}{4}$ millions unaccounted for. For the most part they are young unmarried women living at home. If it is considered that married women should not be 'occupied', then this group represents the largest untapped reservoir of labour power. Among this number there are probably relatively few idle rich women, but we are even farther from gaining any idea how many exactly there may be than we were in discussing the same question with regard to the males. Those women who may be most justly numbered among the idle rich, are married women with a retinue of servants and no children. There are, however, no data upon which even a guess as to their number can be based.

VI

INDUSTRIAL STATUS AND SOCIAL CLASS

WE found reason to believe that the occupation which a man follows is of more immediate importance to him than the industry in which he is engaged. Industrial status is of still greater importance. It makes all the difference to a man following the occupation of agriculture whether he is an employer, say a large farmer employing many labourers; an independent worker, say a small-holder working his holding by himself; or an employee, say a labourer working for wages. Another classification of the occupied population into these three categories is therefore desirable. From the census we get the following table:

TABLE XXXV.

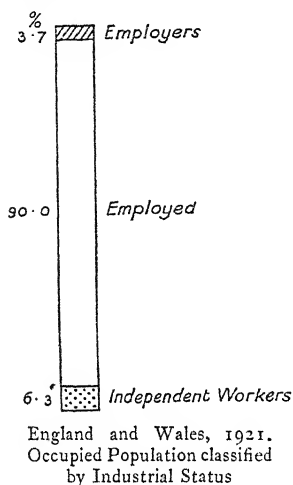
*Industrial Status of the Occupied Population of England and Wales, 1921.¹**

Status	Numbers (000s)			Percentage of Total Occupied.
	Males.	Females	Total	
Employer	563 2	73 7	637	3 7
Employed	10,800 3	4,664 6	15,465	90
Worker on own account	749 2	327 0	1,076	6 3
Total	12,113	5,065	17,178	100

Let us consider these three groups. The group of employers includes both the heads of great businesses with thousands of workpeople, and small shopkeepers with a single employed assistant. There may be something that all employers share in common, but if there is it does not cement them firmly together. The group

* These figures agree closely with the results of the Census of Production of 1907. In the final report of that census it was estimated that of the 9½ million persons in the United Kingdom who came within its scope (excluding agriculture and fisheries), 2 8% were employers, 90 7% employees, and 6 5% independent workers.²

is clearly of heterogenous composition. The same may be said of the independent workers. Among these are included both successful free-lance professional men, doctors



and barristers for instance, and independent artisans, such as village blacksmiths in a small way of business and without an employed assistant. The members of this group have still less in common. What is the position with regard to the employed? Among these, again, are included both men with salaries running into five figures, and casual labourers. Taken as a whole, this group has even less cohesion than the other two. But it may be suggested that we have here two distinct elements, the salaried and the wage-earning,

and that, if they are separated, one of them at least may be found to exhibit a considerable amount of cohesion.

The Census of Population makes no distinction between the salaried and the wage-earning. The Census of Production of 1907 does make such a distinction, and the total of roughly seven million salaried and wage-earning persons actually enumerated in this census (excluding those engaged in agriculture and fisheries) is divided in the proportion of 7 per cent. salaried and 93 per cent. wage-earning.³ These proportions, however, cannot hold good of the whole employed section of the occupied population, because the sample of the population covered by the census did not include large classes of salaried persons such as teachers and Government officials. Therefore more than 7 per cent. of the employed section must be salaried. Professor Bowley and Sir Josiah Stamp have recently estimated⁴ the occupied population of Great Britain and Northern Ireland, in 1924, to be divisible as follows:

TABLE XXXVI

	<i>Men and Boys. (000s)</i>	<i>Women and Girls (000s)</i>	<i>Total (000s)</i>	<i>Per cent.</i>
Wage-earners .	11,000	4,400	15,400	76
Salaried .	1,700	1,100	2,800	14
Independent Workers	900	400	1,300	6
Proprietors, Farmers, Businessmen	700	100	800	4
Total Occupied .	14,300	6,000 *	20,300	100

This would indicate a much higher figure for the salaried class than the Census of Production showed. However that may be, let us consider how the class is composed.

This salaried group as a whole shows no coherence. It includes a certain number of persons with very large salaries and many with salaries on a level with those of wage-earners. With regard to the wage-earning group matters are different. Here at length we do find a class exhibiting some homogeneity, and the homogeneity has increased of late years. There are three main reasons which account for the increasing consolidation of this section of the community. There is a tendency for all manual labourers to become semi-skilled machine-minders, and for highly skilled as well as unskilled workers to become relatively less important. The trade unions are being reorganized on industrial lines, and are admitting skilled and unskilled into the same organizations. There is now also less of a gap between the wages of the skilled and the unskilled. The existence of coherent self-conscious groups is of great importance. A general strike is possible only when the wage-earners exhibit a certain degree of coherence and homogeneity. We are approaching here the discussion of the existence of social classes, but before we enter upon this matter there are other points to which brief reference must be made.

The figures quoted in Table XXXV for the distribution of the occupied population into three categories, render it simple to work out the ratio of employees to employers. There are about 24 employees to every employer. But

averages such as this do not mean much. It was pointed out in the first chapter that it was not the average number in a family that was important, so much as information as to the commonest type of family and as to the numbers of children belonging to families of various sizes. We have this information for families, but there is no such information for industrial groups. We should like to have, but cannot get, figures showing the numbers of groups of employees of various sizes. We should then know how many employees are members of large groups. This is an important matter, because the size of the group with which daily contact is made affects the outlook of those concerned. There may or may not be a herd instinct; herd emotions can certainly be roused, and the more easily, on the whole, the larger the group.

We can, however, calculate averages not merely for the whole country but also for the six industrial districts. They work out as follows:

TABLE XXXVII⁵

*Occupied Population of England and Wales, 1921.
Number and Distribution of Employers and Employees.*

<i>Area</i>	<i>Number (000s) of</i>		<i>Ratio of Employees to Employers.</i>
	<i>Employers</i>	<i>Employees</i>	
I. Greater London	106	3,197	30
II Lancashire and Parts of Cheshire and Derbyshire	85	2,573	30
III. Yorkshire, West Riding with City of York	49	1,414	29
IV. North-east Coast	22	900	41
V. Birmingham and District	25	855	34
VI. South Wales	18	673	38
Rest of England and Wales	332	5,853	18
All England and Wales	637	15,465	24

It will be seen that the average number of employees to one employer is higher in these industrial districts than in the rest of the country. There are also considerable differences between one district and another. The North-east Coast is remarkable for the large average size of the groups.

This analysis can be extended to different industrial groups. Details are given below for workers in 25 industries who are concerned only with dealing. Those concerned with extracting and manufacturing are excluded. The data for 14 industries are separable into the wholesale and retail sides, and data for 11 other industries are given which are not so separable.

TABLE XXXVIII^a

Ratio of Employees to Employers, in 25 Industries, concerned only with Dealing.

(The Wholesale and Retail Departments were separable in 14 of the Industries)

Area	Ratio of Numbers employed to Number of Proprietors and Managers.		Area	Ratio of Numbers employed to Number of Proprietors and Managers ^b
	14 Wholesale	11 General		
I London	9.4	6.1	I. London	3.7
IV N.-E. Coast	6.8	4.8	IV N.E. Coast	3.2
V. Birmingham	6.9	4.5	VI South Wales	2.8
II Lancashire	6.7	4.2	V Birmingham	2.6
III Yorkshire	5.2	3.8	II Lancashire	2.6
VI South Wales	4.5	3.5	III Yorkshire	2.5

It is evident from these figures that the average size of groups engaged in manufacture and extraction must be much larger than those which are concerned with dealing, because, while the general average is about 2.4, the average here is much lower. Again, the size is greater in wholesaling than in retailing, as might be expected. What is not so readily expected is the considerable difference between the size of groups in one district as compared with another. It is further remarkable that the districts come very much in the same order both in respect of the two sides of the 14 industries and in the 11 other general industries. This last matter, however, is one related to differences in the industrial structure of the different districts, and is thus beyond our scope.

We have classified the occupied section of the popula-

tion by industry, occupation, and industrial status. Have we omitted any important method of social classification? Reflection calls to mind the professional class. No method of classification used hitherto has revealed the professional class, unless it was the occupational classification. Among our occupational groups there was a professional group. It is true that all those universally recognized to be professional men, doctors, barristers, architects, and others, have been placed in this group. Nevertheless, there are many others not placed in the professional group who share some of the characteristics of the typical professional man. There are, for instance, highly placed civil servants and salaried managers in business. Is it possible that a new method of classification is involved in the recognition of professionalism as something distinct from the placing of certain professional men and women in an occupational class by themselves simply because they cannot easily be fitted into any other class?

We may define a profession as an occupation based upon specialized intellectual training, the purpose of which is to supply skilled advice and service to others in return for a definite fee or salary. Professional men are contrasted on the one hand with manual workers, who require no specialized intellectual training as such, and with business men on the other hand. The typical business man or 'undertaker' not only requires no specialized intellectual training, but has a function to perform, quite different from that of the professional man, for which he is remunerated by 'profit'. He has to plan the adaptation of new processes to industry, to organize with that end in view, and to bear the risks of the undertaking. If we look in fact at the occupied section of the population, we seem to distinguish three main functions. In the first place we have the manual workers. Putting them aside, we observe that the second function, that of undertaking, though it is no less essential than it has ever been, tends increasingly to be split up, the risk-bearing being placed upon the shareholders and

the organization being delegated to salaried managers. 'Undertakers' as a class are not so easily isolated and distinguished as formerly. The professional functions on the contrary are becoming more clearly defined, and the boundaries of professionalism are constantly being enlarged. There is also among the non-manual labour section a large undifferentiated mass of clerical and other workers to whom no undertaker function falls, and who cannot be called professional workers in any strict sense of the term.

This line of thought cannot be pursued further. Enough has perhaps been said to indicate that the recognition of a professional class may involve much more than the recognition of an occupational group on the same footing as other groups in the list of occupations. It may be that it indicates the existence of a method of classification by basal functions as against the somewhat arbitrary and superficial method used in distinguishing occupations. Be this as it may, all those coming within the definition of a profession given above, when strictly interpreted, also come within the professional group in the occupational census, and, since this is an important group to which sufficient attention has not yet been paid here, we may now look at the following table, which gives an analysis of this group:

TABLE XXXIX.⁷
Professional Occupations.

<i>Occupations connected with</i>	<i>Nos. Occupied (000s.).</i>			<i>Per cent. of Total.</i>
	<i>M.</i>	<i>F.</i>	<i>Total.</i>	
Teaching	74	204	278	42
Medicine and Care of the Sick	51	120	171	26
Religion	43	13	56	8
Consultant Engineering, Analytical Chemistry, and other Sciences	36	2	38	6
Law and Accountancy	25	—	25	4
Art and Architecture	19	4	23	3
Writing and Publication	13	3	16	2
Other Professional Occupations	9	3	12	2
Articled Clerks, Pupils, and Other Students	37	11	48	7
Total	307	360	667	100

The total is impressive, amounting to two-thirds of a million. But it must be remembered that the group accounts for less than 4 per cent. of the occupied population. Over 40 per cent. of the group is occupied with teaching, and, since there are many more women than men teachers, this largely accounts for the surprising fact that among professionals as here defined, women outnumber men. Some further analysis is clearly desirable. The definition used is a wide one in a certain sense, though not perhaps in another. It includes nurses, for instance, and excludes highly placed civil servants. We can attempt to separate the more highly skilled from the less highly skilled, and this has been done in the following table:

TABLE XL⁷
Professional Occupations.

<i>More highly skilled</i>	<i>M.</i>	<i>F.</i>	<i>Less highly skilled</i>	<i>M.</i>	<i>F.</i>
Clergymen, Priests, Ministers, &c	35,223	4,116	Itinerant Preachers	3,752	7,962
Barristers, Solicitors	17,909	37	Officials of Religious Societies and Churches, Chapels, &c	4,491	792
Physicians, Surgeons, &c.	22,965	1,253	Midwives	—	5,507
Dentists	8,963	296	Sick Nurses and Subordinate Medical Service	7,677	100,966
Veterinary Surgeons, &c.	2,127	24	Mental Attendants	9,185	11,613
Teachers (Certificated, College trained, and others)	58,095	110,670	Teachers (not Certificated or not College Trained, Supplementary) ⁸	10,760	76,682
Consultant Engineers	20,880	46	Teachers of Music	4,919	16,450
Architects, Ship Designers, Naval Architects	10,538	57	Laboratory Attendants	3,798	907
Chartered Accountants, &c	7,217	43	Librarians	1,310	832
Analytical Chemists, &c	10,416	519	Political Association Officials	1,159	243
Others engaged in Scientific Pursuits	1,280	220	Industrial and Trade Assocn Officials	3,365	227
Articled Clerks, &c.	37,200	11,295	Social Welfare Workers	1,222	1,863
Authors, Editors, &c	11,229	2,028	Other Professional Occupations	3,016	1,150
Painters, Sculptors, &c.	8,134	4,184			
Total	252,176	134,788	Total	54,654	225,194
	386,964			279,848	
	58%			42%	

Opinions will vary as to the justness of some of the allocations in this table, though it cannot be denied that in general it does represent a division into more and less skilled. The more skilled form 58 per cent. of the total. Some may hold that the division of teachers as adopted is not satisfactory, and that it would represent the facts better to place all elementary teachers among the less highly skilled. Because of such possible difference of opinion, and the relatively large influence of teachers on the result, it may be well to see what the effect is when they are omitted altogether from both lists. The proportion which the highly skilled then form of the total drops to 53 per cent.⁹ Taking the division as given in the table, we find that 65 per cent. of the highly skilled professionals are men, or putting it in another way, out of every three highly skilled professionals two are men and one is a woman. Women form 80 per cent. of the less highly skilled professionals, a very substantial proportion, numbering something like 100,000, being nurses. There are, in fact, among every five less skilled professionals four women and one man.

We have employed various methods of classifying the population and no methods as yet used have brought to light the existence of social classes. It may be pointed out that we have not classified the population by amount of income or possession of wealth. We do not underestimate the importance of differences in these respects; in fact, we devote more than one later chapter to these subjects. But since incomes and holdings of property are continuously graded, it is clear that amount of income and holding of property cannot of themselves form the basis of classification into anything in the nature of discontinuous social classes. We may distinguish between those above and those below the income-tax level, but the distinction is arbitrary and obviously does not correspond with true class distinctions. Marked differences in the average income and the average holding of property as between one group and another, the difference between the groups being founded on some other criterion, may

supplement the more essential distinctions which serve to identify these groups. That is the only importance which can be attributed to income and property in any attempted definition of social classes.

But do social classes exist? We hear less than formerly of the 'upper', 'middle', and 'lower' social classes. We do, however, hear much about 'class consciousness' and 'class warfare'. If class warfare is a fact, it should be possible for the statistician to estimate the strength of the battalions ranged against one another. Further, if social classes do exist, it follows either that we have omitted some important method of classification or that these classes are the resultants of many group-forming factors acting together, which we have only considered separately. Social classes may, however, be a sheer figment of the imagination. What is the true state of the case?

Let us examine two well-known attempts to classify the population into social classes. The late Mr. Charles Booth classified the inhabitants of East London into eight such classes.¹⁰ A glance at this classification, however, shows that it is based upon income. The four higher classes are stated to be above the 'poverty line'. For the reasons already given, however interesting and valuable this work may be as a contribution to the study of the distribution of income, it reveals no method omitted by us whereby social classes may be distinguished. Much the same may be said of the classification by the Registrar-General in his report for 1911 of the population into five social grades.¹¹ These grades were: (1) upper and middle; (2) intermediate; (3) skilled; (4) intermediate; and (5) unskilled. The kind of people a man associated with in everyday life was the criterion used to decide into what grade he should go. In consequence the grading was not quite what it would have been had income alone been considered. All shopkeepers, for instance, were placed in Class II, though some must have had larger incomes than many in Class I, while others must have had incomes no higher than

many in Class III. In so far as this classification does depart from an income classification, and the difference is not great, it is not based upon any clear principle of fundamental importance omitted by us.

It would thus seem that so far as social class is a reality and not an illusion, it must be a resultant of many factors. One would think that there must be some reality behind all the talk of class. There must be some fire to account for all the smoke. At one time many factors conspired together to produce an 'upper' class with characters sufficiently definite to enable it to be recognized. There is no longer any recognizable 'upper' class, and as to the 'middle' class, it never was anything more than a heterogeneous assemblage of very diverse and non-cohesive elements. At the present day the wage-earning element of the employed group does, it is true, exhibit a certain degree of cohesion. The specific characteristics of wage-earning are well marked—the weekly cash wage and the uncertainty regarding future employment. Other characteristics common to wage-earners, the low average income and the absence of property, serve to implement the self-consciousness of the group.

Many factors do thus combine to produce one moderately cohesive and self-conscious group. But it is misleading to speak of class divisions and class distinctions to-day, because no other similar groups exist. Again, on the one hand the wage-earning group is seamed by occupational and industrial divisions. Upon many an issue it may be divided against itself. On the other hand the ideals for which the group is urged to strive, appeal each of them in varying degrees to sections of non-wage-earners. When, therefore, it comes to practical issues there is seldom or never to be found a sharp dividing line between wage-earners and the rest. The line sometimes falls in one place and sometimes in another. Persuasive appeals are made to workers by hand and brain. Who is excluded? Strident orders are issued to embark upon class warfare. But who is on our side and where

is the enemy? The belief in the existence of social classes, or even of one social class, the interests of the members of which are identical, or nearly so, and opposed to the interests of the rest of the community, is the result of studying social theory of doubtful value and of neglecting social facts.

VII

OCCUPATIONAL ASSOCIATIONS

AT one period in the history of this country occupational associations in the form of guilds or corporations were an important feature of social organization. They ceased to play a part of any importance in the eighteenth century. During the last century they again emerged, though in a new shape, and are coming to assume a position of great significance. There can now hardly be any clearly defined occupation among the followers of which there is not some form of association, though it may include only a small minority of those eligible for membership. Wherever we look, whether among wage-earners, higher civil servants, journalists, factory welfare workers, or midwives, we find occupational associations.

The associations which we have in mind are concerned with the status and remuneration of their members whether or not they have also other objects. Thus they are built around those two aspects of a man's position in society which we have found to be of most importance to him, namely his occupation and his industrial status. The occupation may be skilled or unskilled. It may involve work chiefly by hand or chiefly by brain. The association may be wholly concerned with conditions of work and remuneration, or it may also be concerned with the study and promotion of a craft and with other matters. Let us see what associations are excluded by this definition.

There are many associations which are concerned only with the study of a subject or with the development of a technique. Thus the British Association for the Advancement of Science has the object indicated by the title, and does not deal with the status or remuneration of scientific workers. Many occupational associations of the kind

that we shall later distinguish as professional associations are closely concerned with the study and promotion of a subject. This in itself does not exclude them from consideration here, but it is sometimes difficult to say whether their interest in status and conditions, which is the criterion we have adopted, is sufficiently strong to warrant their inclusion. There is another class of association that we may call trading associations, the members of which are employers who co-operate to bargain with employees, to regulate prices, and for other purposes. They are excluded here on the grounds, first, that no defined occupation is common to the members, and second, that joint action for the purpose of bargaining with employees and fixing prices is wholly distinct from joint action by members of an association to safeguard or improve their own status and their own fees or salaries. Again, there are a very large number of associations the members of which have a common interest in some religious observance, a political programme, or a social activity. Many occupational associations indeed have political or social objects in addition to their other interests. We exclude here merely such associations as have only political, religious, or social objects.

What then are the associations to be included? They fall into two groups. There is the group of what we may call professional associations, and the group which includes what are commonly known as trade unions. Members of the Law Society have a common occupation and are much concerned with their status and remuneration. The same applies to members of the British Medical Association and of the Royal Institute of British Architects. By definition, therefore, these and other similar professional associations are occupational associations and are included together with trade unions in the same category. Is there not something absurd, it may be objected, about a method of classification which puts these professional associations and trade unions in the same class? What greater contrast is there than that between professional men and trade unionists in social

outlook and political objectives? This may or may not be admitted. In any case the objection is beside the point. We are not classifying men by social outlook or political views. We have adopted for our present purpose a particular definition of an occupational association, and if we consider the matter in the light of that definition we shall find that professional associations and trade unions grade continuously into one another. The result is that the distinction between our two groups of occupational associations, from that point of view, is not well marked and can only be made with difficulty.

One aspect of the definition relates to the occupation followed, and certainly here no sharp distinction can be drawn between professional associations and trade unions. The amount of skill required varies by small steps in degree and in kind as we pass from the learned professions to the unskilled labouring class. It cannot even be said that brain work is confined to the professions and manual work to the trade unions. The Railway Clerks' Association, for instance, is a trade union, and some professional men, such as surgeons, do much of their work by hand. When, however, we come to the action taken to secure status and remuneration there seems at first sight to be something approaching a qualitative distinction. Trade unions negotiate with employers, whereas professional associations seldom do so. The typical professional man is a free lance and as such has no employer with whom to negotiate. But when members of a free-lance profession take salaried positions they are neither unwilling to bargain collectively nor inept at so doing, as the history of the British Medical Association shows. Further, we find among such typical professional men as chemists a trade union, the British Association of Chemists, one of the main objects of which is to bargain with employers. This distinction is therefore more apparent than real: it does not suffice everywhere to establish a qualitative difference.

The upshot of our discussion is that, among occupational associations, professional associations in general

include those who are predominantly brain workers and free lances, whereas the trade unions in general include those who are predominantly manual workers and wage-earners. The term trade union is used here, it should be noticed, in the everyday meaning of the term and not in the legal sense. In law a trade union may be an association of employers. Here we confine the term to those associations of wage-earners which inspire so much loyalty in certain members of the community while others look upon them with alarm as the seed beds of revolution.

The membership of trade unions thus defined is given by industries for five different years in the following table. Some persons (principally teachers) are members of more than one association, and when allowance is made for this fact the total membership in 1925 is reduced to approximately 5,450,000.

TABLE XLI¹

Industries arranged in Order according to Number of Workers (thousands) therein who belong to Trade Unions: Great Britain and Northern Ireland.

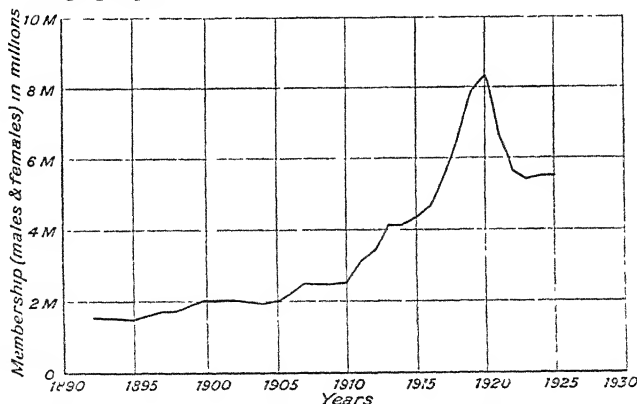
	1913	1920.	1923.	1924.	1925.
Transport	694	1,268	936	1,030	1,048
Mining and Quarrying . . .	920	1,157	924	971	938
*Metals, Machines, Conveyances	560	1,173	736	704	682
Textiles	523	833	613	617	626
General Labour	345	1,229	415	493	488
*Building, Public Works, Contracting, &c.	243	563	357	337	334
National and Local Government	234	462	359	320	334
Commerce, Distribution, and Finance	120	400	211	219	222
Paper, Printing, &c	91	227	187	194	207
Teaching	113	197	197	195	196
Clothing	108	236	162	166	168
†Other Manufacturing	57	140	87	84	83
Miscellaneous	60	155	86	83	82
Woodworking and Furnishing	46	87	63	66	67
*Agriculture, &c.	21	210	80	61	47
	4,135	8,337	5,413	5,534	5,522

* Exclusive of membership of General Labour Unions

† Comprising Pottery and Glass; Food, Drink, and Tobacco; &c

It will be seen that membership more than doubled between 1913 and 1920, since which date it has con-

siderably declined, most of the decrease having taken place soon after 1920. The decrease has not affected all industries equally. It is most apparent in agriculture and general labour, that is, in the worst paid industries. The worst paid workers are the most difficult to organize and in times of depression they are the first to discontinue membership. If we take a more extended view we find that trade-union membership advances in waves, but that the low points following the peaks leave the strength of the movement as measured by numbers greater than before. In 1892 the membership was about a million and a half; it first reached two millions in 1900, and two and a half millions in 1907. Before the war it exceeded four millions, but the post-war depression only reduced the number to just below five and a half millions at its lowest point.² The course of events is set out in the following graph:



Trade unionism is strongest in certain industries. These industries are for the most part those in which the workers are congregated together. The converse is perhaps more true, trade unionism is weak where, as in agriculture and in the distributive trades, the workers are more or less isolated. As explained in a former chapter, many industries are localized, and it thus comes about that trade unionism flourishes more in certain localities than elsewhere, especially in Lancashire,

Yorkshire, the North-east Coast, and South Wales. Table XLI, showing the total trade-union membership by industry, does not admit of comparison with Tables XX and XXI (Ch. IV), which give the total following each industry, because the former figures refer to Great Britain and Northern Ireland and the latter to England and Wales. We can, however, obtain estimates for the totals engaged in various industries in Great Britain and Northern Ireland in 1921, and for the trade-union membership of industries in the same area in the same year. If we consider the industries of Coal and Shale Mining and of Agriculture we find that in the case of the former about 70 per cent., and in the case of the latter about 10 per cent., of those engaged in these industries were organized in trade unions.³

Organization is weak among juveniles largely because they do not immediately settle down in one occupation; it is weak among women largely because they frequently drift away into domesticity at an early age. No facts are available as to the age distribution of members, but since 1896 the figures have been given separately for the sexes. In 1896 women formed about one-tenth of the male membership and in 1925 about two-elevenths (4,690,000 men and 832,000 women).² Trade unions have never enrolled more than 50 per cent. of the male and 20 per cent. of the female wage-earners, which point they reached in 1920.

While the membership of trade unions has greatly increased during the last thirty years, the same is not true of the number of unions. There were 1,233 unions in 1892 and 1,144 in 1925. The highest total reached during the period was 1,362 in 1920.² Amalgamation of unions is the explanation. In addition to amalgamation we have to note the tendency towards federation. In 1925 2,914,000 members of trade unions, or 53 per cent. of the total membership, belonged to unions which were affiliated to federations.¹ It is often difficult to distinguish for practical purposes between amalgamations and federations. There are numerous unions of miners

all affiliated to the Miners' Federation of Great Britain, which in important matters acts for the miners as a whole. It would be misleading to lay stress upon the existence of separate unions in the mining industry. It would be more in accord with the facts of the case to regard the miners as included in a single union, though this is not a strictly accurate statement of the position.

The bulk of trade-union membership is concentrated in a few associations. There are some unions, using the term strictly, with a very large membership. The National Union of Railwaymen has 327,000 members, the Transport and General Workers Union 300,000, the Amalgamated Engineering Union 205,000. There are also federations of great size which for all practical purposes are single unions, such as the Miners' Federation of Great Britain with 800,000 members.⁵ This concentration of membership is well shown by an examination of the figures relating to the Trade Union Congress of 1926. According to the rules governing membership, as set out in the standing orders of the Congress, the Trade Union Congress consists of 'bona fide trade union organizations'. In the official report of the Congress we find a list of 'societies' by which delegates were appointed to attend the Congress, and a scrutiny of this list shows that by 'societies' are meant not only unions in the strict sense of the word but also federations such as the Miners' Federation. Only 207 'societies' were represented. Nevertheless, the membership of these 207 societies amounted to 4,365,619, or nearly four-fifths of the whole membership of trade unions. If we examine the membership of the societies represented, we find that twenty societies had more than 50,000 and eight of them had over 100,000 members. These eight had in all well over 2 million members, and thus of the 207 societies represented at the Congress eight contained over one half the total of trade unionists represented.⁶ A few big societies thus dominate the trade-union world.

The expenditure of trade unions has attracted attention, and it may be of interest to set out the figures so far

as they are available. They exist only for registered trade unions, that is to say, for unions which avail themselves of the privileges accruing to registration with the Registrar of Friendly Societies, for which they must comply with certain regulations and render financial statements. At the end of 1924 there were 484 registered unions with a membership of 4,458,147. Their accumulated funds amounted to £11,066,394 at the beginning of the year and to £11,434,414 at the end of the year. The following table gives particulars of the income and expenditure of these unions. They administered a little over £2,000,000 on behalf of the National Unemployment Insurance Scheme, and this amount which cancels out can be disregarded. There are two interesting points with reference to the expenditure of money received from their members. Management expenses amount to over 30 per cent. of the total expenditure, and to nearly three times the amount spent on dispute benefit. The explanation is in part, no doubt, that many unions are mainly organizations for negotiating with employers, and as such have nothing, when a dispute is not in progress, upon which to spend their money except management. The other interesting point is the relatively small amount contributed to political funds.

TABLE XLII⁷

Income and Expenditure of Registered Trade Unions. Great Britain, 1924.

<i>Income.</i>	<i>£000s</i>	<i>Expenditure</i>	<i>£000s</i>
Membership .	8,236	Benefit	
		National	
Ministry of Labour	2,070	Insurance Funds)	2,070
Other Sources .	614	Unemployment Benefit }	
		Travelling	1,106
		Emigration	
		Sickness and Accident	819
		Funeral	307
		Dispute	1,151
		Other .	984
			<hr/>
		Political Funds	4,307
		Grants to Federations	215
		Management .	668
			<hr/>
	10,920		10,552

That no easy distinction can be made between trade unions and professional associations is evident when we recall that associations of teachers have been included among trade unions. Teachers are salaried brain workers, and thus occupy a midway position between the free-lance brain workers and the employed manual workers. They have been included among trade unionists because their association is actively engaged in collective bargaining. However arbitrary the line may be, it has been drawn at this point, and we have now to consider the remaining occupational associations which are also concerned with the remuneration and status of their members.

The great and growing importance of professional associations is not sufficiently recognized. There are reasons for thinking that they are silently affecting a profound change in the social structure of this country. The time seems not far distant when the man who is not a member of either a trade union or of a professional association will be a homeless and unprotected person. It would thus be of great interest to review the statistics of membership of professional associations. Unfortunately this does not seem possible; the difficulties are too great.

The first difficulty arises from the fact that these associations of brain workers nearly always include among their objects the study and promotion of their subject. As we have already explained, it is often very difficult to decide whether such an association is also sufficiently concerned with the status and remuneration of its members to justify its inclusion among professional associations as defined here. There are, for example, very well organized and powerful associations among engineers, but they concern themselves so little with status and remuneration that it would perhaps be misleading to include them. To omit them, on the other hand, would seem to be equally misleading because it would suggest, what is emphatically not the case, that associations, generally called professional, did not exist among engineers. This kind of difficulty does not obtain

in relation to the corresponding associations of manual workers, because they associate mainly to advance status and remuneration. Their craft is not sufficiently complex to require an association for its study.

Another difficulty arises from the existence of a large amount of duplication. Many professional men belong to more than one association that would be classed by us as a professional association. One of the authors of this volume belongs to three such associations. There is no method of allowing for this overlapping. A third and somewhat unexpected difficulty comes into view when a statistical treatment is attempted. There are a number of professions which are 'closed'. Complete closure exists when, as among dentists, certain functions and certain titles are legally reserved to persons whose names appear upon a statutory register. Effective closure exists when, though the title is not protected, functions are reserved to registered persons. The latter is the case among medical practitioners. Now it is frequently found that where a profession is closed the professional association does not include half the registered persons. Thus about a half of the medical practitioners belong to the British Medical Association, and less than half of the solicitors belong to the Law Society. The reason seems to be that, when a profession is closed, the professional association has not much to offer ; the position is fairly secure and there is no great inducement to pay the subscription. However this may be, it renders a statistical treatment difficult. Closed professions are not in this respect strictly comparable with other professions. Thus we must abandon, though with regret, any attempt to treat professional associations statistically.

VIII

OTHER ASSOCIATIONS

THE course which we have followed led us to discuss occupational associations in the last chapter. At this point the main road leads to a discussion of the most immediately important result of being occupied, namely income; but there is a by-road which invites some exploration. We may go up it some little way and then return. We are in fact tempted at this point to say something of associations other than occupational associations; but these other associations cut across industrial, occupational, and income classifications, and this is what is meant by saying that we are here exploring a by-road.

We have stressed the importance of occupational associations. But in addition to these there are other associations of many different kinds, and their multiplication is one of the features of a modern civilized community. The interests which bring men together may be classed in various ways—political, intellectual, social, religious. Readers will surprise themselves if they attempt to add up the number of associations to which they belong. Students of social theory have been led to take this amazing development of modern times into account and to discuss the ‘minor loyalties’ which such associations create. We cannot pass by this feature of modern social organization in silence. On the other hand, the position hardly admits of statistical treatment. Something may be said as to three of the types of associations we have mentioned—the religious, political, and social types—with the object not so much of attempting any complete survey as of indicating that there is here a most important aspect of modern social structure.

We are better situated with respect to religious than

to political or social associations, though even here, owing to the absence of a religious census such as is usual in other countries, the data are unsatisfactory. We have to rely upon the figures of membership given by various denominations. It is not always clear what is held to constitute membership, or even to what area any recorded membership refers. Suspicions are sometimes expressed that membership records are kept with laxity, or are unduly swollen, but it would not seem in most cases that there is good ground for these suspicions. It is true that definition of membership varies, and this makes comparison difficult. We have, however, to make the best of existing data, and in the following table the position is set out for religious organizations claiming more than 50,000 members. It will, of course, be understood that some of these bodies have a much larger total membership. Thus the Church of England claims a world communicant membership of over 10,000,000,¹ and the Wesleyan Methodists claim adherents to the number of 32,000,000.²

TABLE XLIII.

Membership of Religious Organizations

<i>Organization.</i>	<i>Area</i>	<i>Qualification</i>	<i>Number</i> (000s)
Church of England ¹ .	England and Wales	Communicants	2,701
Roman Catholic ⁴	Great Britain .	Catholic Population	2,662
Episcopal Church in Scotland ⁷	Scotland	Communicants	763
United Free Church of Scotland ⁶	Scotland	Members . . .	536
Presbyterian Church of England ⁷	England	Members . . .	85
Calvinistic Methodists ⁸	England and Wales	Communicants	189
Wesleyan Methodists ⁹	Great Britain .	Members and Probationers	519
Primitive Methodists ⁹	Great Britain .	Members and Probationers	219
United Methodist Church ⁹	Great Britain	Members and Probationers	148
Congregationalists ¹⁰ .	England and Wales	Members . . .	463
Baptists ¹¹ . . .	United Kingdom	Members . . .	417
			8,702

In this table the area to which the figures refer, or appear to refer, is given. The data is the latest available, namely 1925 or 1926 in each case, and an attempt is

also made to indicate the basis on which the totals are arrived at. The Church of England figures are based on a count of the communicants during Easter week. The Free Church figures also, in general, include only those who are enrolled as communicants, for that is what membership in the Free Churches implies. Probationers are on their way to become full members. There may be a number of adherents who attend the services and support the funds of a Church, but if they are not full members, or applicants for full membership, they do not appear in the figures given in the table. The statistics of the Methodist bodies are collected periodically by the District Synods, and those of the Baptists and Congregationalists are obtained from the County Unions and Associations. While every effort is made to get the figures as complete and exact as possible, it seems clear that only an approximation to the true totals can be attained. We therefore record them to the nearest 1,000 with the reminder that membership may not imply the same degree of attachment to the organization in all cases. It is to be noted that the Roman Catholic figures are not limited in any way, but refer to babies as well as adults, in fact to the total Roman Catholic population as estimated and recorded in the official handbook of that body. It is admitted in the handbook that the figures for several of the dioceses which form the basis of the estimate cannot in many cases be accurate, and another estimate is offered which is based on the number of Roman Catholic baptisms and the ratio of baptisms to marriages. By comparing the apparent birth-rate among Catholics with that for the whole population the new estimate obtained for the Catholic population exceeds that recorded in the table by about 500,000.¹²

There are numerous smaller organizations with a membership of less than 50,000. There is, for instance, the Countess of Huntingdon's Connexion with 1,624 members.¹ Some, though small, are important, such as the Society of Friends, with a membership of 19,081 in Great Britain.⁸ It is impossible to say what the total

membership of these smaller bodies amounts to. There are also large bodies, such as the Salvation Army, which has no criterion for membership and nevertheless is not unimportant in the religious life of the country. It is estimated that there are some 300,000 Jews in the United Kingdom, though apparently it is not known how many practise their own religion.⁸

A well-known annual publication opens its section on the Religions of the British Isles with the statement that 'the inhabitants of Great Britain and Ireland are almost entirely Christians'. Used in this sense a Christian appears to mean some one who is not a Moham-medan, a Buddhist, or some form of infidel, but not to exclude pagans, for the figures given above seem to indicate that only something like one-quarter of the adult population of Great Britain are active members of a religious organization. Even this strength of membership is somewhat surprising, and it is to be remembered that the figures purport to be minima rather than maxima. The Sunday aspect of England hardly suggests that the Churches have still the hold that the figures claim.

If a wide meaning is given to the adjective 'political', it is found that innumerable voluntary associations exist to promote political interests. Societies of greater or less importance can be found having as their object the reform, or at least the amendment, of the law as it affects every aspect of our social organization. The changes aimed at may be fundamental or trivial, definite or vague. The objects vary from the overthrow of capitalism to the protection of the lapwing. The programme may be one capable of fulfilment in a few years, or even months, such as the passing of a particular bill, in which case the association may be dissolved almost as soon as created unless it finds other objectives. On the other hand, the programme may be so ambitious, the suppression of vice for instance, that the society may be permanent, unless indeed through weariness it drops out of existence.

It is obviously impossible to give any account of these associations. If they had to be registered and to make

statistical returns to a Government department something could be said about them. But it may be asked whether we have not some information about political associations in the narrower sense. Is anything definitely known about the strength of the three great political parties? It is, of course, possible to obtain the total number of votes cast for Conservative, Liberal, and Labour candidates. But this information is no indication of anything equivalent to membership in the real sense. There are numerous Conservative and Liberal clubs, the total membership of which might with great labour be collected. But there is no national Conservative or Liberal organization to which all or even most of the adherents of these parties belong. About the first two political parties, therefore, nothing can be said. Matters stand somewhat differently with regard to the Labour party. That party has a definite constitution, and consists of a federation of trade unions, trades councils, and constituency Labour parties and Socialist societies. In 1924 the party included 108 trade unions with a membership of 3,158,002, seven Socialist societies with a membership of 36,397, and 529 trades councils and constituency Labour parties the membership of which is not given. The total membership recorded for 1924 in the *Labour Year Book* is thus 3,194,399.¹³ This figure, however, is obviously of little value. It is well known that many members of trade unions, whether affiliated to the Labour party or not, do not vote for Labour candidates at election time. On the other hand, many voters consistently vote Labour who are not official members of the party. Even here, therefore, we fail to get statistics of any value. The only figures which are reliable in the sense that they relate to persons who are pledged to a definite political programme, are the 36,397 recorded as members of the seven Socialist societies and the 10,730 recorded as members of the Communist Party of Great Britain.¹⁴ It seems that the farther to the left one goes in politics, the more definite does the position become. Those on the right may say

that this is so because those on the left hold dogmas, and it is as easy to enumerate the true believers as in the case of a church. To this the reply would presumably be that those on the right have no principles but only vague prejudices, and hence they escape the activities of statisticians.

The two remaining interests round which associations chiefly centre are the study or subject interest and the social or recreative interest. All that we have said above regarding the multiplicity of political associations holds good in these fields. For practical purposes there is no end to the number of study or social associations. We cannot attempt to enumerate them. We can merely emphasize their great and growing importance in the social life of this country. There is, however, one form of social association of some little interest at the present time with regard to which figures are available. We refer to registered clubs.

All clubs which supply intoxicating liquor are obliged to be registered. Such clubs do not need a licence, but they must lodge a return each year giving particulars as to membership and other matters, which are entered on a register kept by the Clerk to the Licensing Justices. These clubs are interesting because of the rapid growth in their number. On January 1, 1926, there were 12,134 registered clubs in England and Wales, or 3.12 per 10,000 of the population. In 1904 there were 6,371, or 1.89 per 10,000 of the population. The increase has been rapid since the war, amounting in one year to as much as 11.74 per cent. on the previous year.¹⁵ The United Kingdom Alliance made a careful classification of 10,712 out of 11,780 clubs registered in 1925, as shown in the table on p. 89.

The total estimated membership of the 11,780 clubs was 3,767,000. But this is a misleading figure. There is much duplication; many men belong to more than one club. After a considerable reduction has been made for duplication the figure still greatly exaggerates the number of club users. Thus the Incorporated Law

Society is entered with 9,666 members, whereas the active membership is a few hundreds daily for lunch.¹⁷

TABLE XLIV.¹⁸

Analysis of 10,712 out of 11,780 Registered Clubs—England and Wales, 1925.

Conservative	1,321
Liberal	546
Ex-service and Military	1,391
Golf	736
Athletic	1,075
Works (mainly dining and athletic)	621
Masonic	525
General	1,670
Workmen's, Trade Union, and Friendly Society	2,827
	<hr/>
	10,712

Nevertheless, the number of registered clubs and of registered club users is increasing. The same may be said of most forms of social, recreative, and study associations, though the position cannot be illustrated by figures.

IX

THE NATIONAL INCOME

IN the last chapter we took a few steps up a side track and noticed, if we did not explore, certain activities of the population which are not primarily connected with making a living. Let us now return to the main route. The people of this country follow occupations, engage in industries which are concentrated in certain localities, and organize themselves according to their work mainly in order to make a living. It seems therefore appropriate that at this point we should discuss the national income, since the getting of an income is the chief object of the activities hitherto described. One method of procedure immediately suggests itself. We might attempt to add up all individual incomes to see if we can arrive at the amount of the national income. Afterwards we shall naturally be led to ask questions as to its distribution.

While the idea of summing-up all individual incomes in order to arrive at the national income is simple enough, there are many aspects of the procedure which demand careful scrutiny. Different meanings are given to the term national income. There are numerous traps awaiting the unwary who are not clear as to the meaning which they attach to the term. A brief examination of the definitions employed and the procedure adopted is therefore required before we attempt the summation. Let us begin with 'the broad definition of total income' given by Professor Bowley and Sir Josiah Stamp as 'the sum-total of the wages, salaries, rental values, profits, and interest' received within a year.¹ In other words, we ascertain and add up all sums received as wages, salaries, profits, interest, and rents of lands and houses (whether in this last case received in cash as rent or enjoyed in kind by the owner-occupier). We thus get a total for

the national income which represents 'the aggregate money expression of those goods produced and those services performed . . . in a year which are, as a fact, generally exchanged for money'.² The basis of the conception is a summation of money payments for goods produced and services rendered within a year. No confusion need arise because some payments are counted though the persons who receive them have neither produced goods nor rendered services, or have only done so in times past. We look to the sources and not to the recipients of income. The tenant of a house pays for the facilities he obtains during the year, and from our point of view it is of no consequence whether he pays the man who originally built it or his son who has inherited it. The house renders a service within the year for which payment is made. The payment is therefore included in the national income.

When boots are sold or medical service is rendered for a fee within the year there is some addition to the national income. On the other hand, if I make my own boots, grow my own vegetables, or gratuitously render medical service, however valuable, there is no addition to the national income as here defined. It thus takes no account of many indispensable services. Of these the most important are the household services performed by wives. Since they are not paid for, they are not counted. Other annual funds of satisfaction such as those derived from the possession of furniture and motor-cars are also excluded because, unlike houses, the satisfaction is not regularly measured in money. If it were (or in so far as it is) the practice to rent motor-cars or furniture like houses, they too would be added. The national income is thus an incomplete measure of services. Further, it is a somewhat variable measure, because the same services may at one time be paid for and at another time be rendered freely. Sir Josiah Stamp illustrates this point as follows.—If a million women perform services in industry worth a hundred million pounds a year and a million wives render services at home, the total contribu-

tion to the national income is £100,000,000. If, however, these ladies change places, the million wives going out to work and earning £100,000,000, while the million women enter domestic service in the homes of the million wives, for which they are paid £100,000,000, there is a total contribution of £200,000,000 to the national income though no additional services are rendered. So long, however, as we are concerned merely with the measurement of the national income at a given date, or with comparisons between dates not far apart, as is the case here, these considerations are only of importance in that services not remunerated by money payments are left out of account. If we were comparing the national income at dates separated by long intervals, it would be necessary to ask whether changes in social habits and practices had taken place which had increased or diminished the national income measured in this manner without any true increase or diminution of services.

Let us now take up another point. When attempting to add up the money values of services remunerated by money, it is legitimate to deduct from a man's gross income that part of it which he is obliged to spend in getting that income. Income-tax payers are in fact allowed, when computing their income for income-tax purposes, to deduct such expenses as those incurred in using the telephone in the course of business. It is the income left after making these deductions by which a man is remunerated for his services. If a man makes £1,000 a year out of his business but has to spend £200 a year in getting the £1,000, we count his income as £800. But he is only allowed to deduct those expenses directly and inevitably incurred in getting his income. The division between these and other expenses is somewhat arbitrary. A man must have boots and clothes in order to pursue his business, but he is not allowed to deduct the cost of these articles from his gross income in order to arrive at his taxable income. Those things only are allowed to be deducted which are not too difficult to define as expenses in practice, and though

for that reason the line is arbitrary the principle is clear. We are attempting to add up the freely spendable incomes which men receive in return for their services.

A grasp of this principle enables us to deal with yet another problem which arises in connexion with the computation of incomes. If the business man with an earned income of £800 a year pays £50 to a private schoolmaster for educating his son, he will not be allowed to deduct the £50 from the £800. But the schoolmaster will also include the £50, together with other sums which he receives from other parents, in computing his income, and in a sense there is here double counting. Nevertheless the procedure is perfectly sound. There is clearly a double service performed, that of the business man and that of the schoolmaster, and therefore it is right that there should be a double counting of income. The money after all is merely a token of service, and the same money by changing hands may serve to represent during the same year the services rendered by more than one person.

Now that the ground has been cleared by explaining in general terms what is counted as income and what is not so counted in the case of an individual, we can describe the procedure adopted in dealing with different classes of incomes. We shall then be prepared to discuss the different meanings which might be assigned to the term 'national income', the result of combining these different classes in different ways. The procedure we propose to describe is that followed by Professor Bowley and Sir Josiah Stamp, who made independent estimates of the National Income before the war, and who have lately joined forces to produce an estimate for 1924. This whole chapter indeed is little more than an account in some detail of their work, to which readers are recommended to turn for fuller information.

Since there is no periodical census of incomes as there is of people, at first sight the notion of trying to add up all individual incomes, though in conception simple, may seem fantastically theoretical. But in

point of fact the Inland Revenue Commissioners do take a kind of census each year of all incomes above a certain level, as all who are required to fill up income-tax forms know to their cost. It is from an analysis of the data obtained in this way that the total income of those individuals, companies, or corporations liable to income-tax is determined. From the total recorded income certain deductions must be made in order to reduce the legal profits to the true commercial profits. On the other hand, some addition must be made to cover evasions of tax. Into these we need not enter.

This accounts for the first and, so far as size of income goes, the most important class of income receivers. There are two other classes to account for: non-wage-earners not liable to income-tax and wage-earners. A relatively small proportion of wage-earners are liable to income-tax, but it is convenient to separate them out and to consider all wage-earners as a single class together. While returns are published annually with regard to the first group of incomes, those liable to tax, there are no similar publications relating to incomes of the second and third groups, and the methods employed to estimate their totals are therefore quite distinct. Information regarding the second or intermediate group is chiefly derived from unofficial inquiries. Such an inquiry was made by a committee of the British Association for the year 1910, and another inquiry on the same lines was made by Bowley and Stamp for 1924. The method followed by the committee³ was to take 31 occupation groups falling within this class, for which the number occupied was known, and to assign to each group an average income with a certain range of possible error. The information regarding Government servants, the Army and Navy, clergy, elementary teachers, bank and railway servants, was fairly exact. The incomes of clerks and shop-assistants was estimated from representative samples by direct inquiry. The incomes of small farmers were based on the rental values of farms. In addition, an estimate was made of the income derived

from the property held by this class. For knowledge concerning incomes of members of the third group we depend upon the results of the Board of Trade inquiry into earnings and hours conducted in 1906. From this source the average weekly earnings in different industries can be estimated for a given date and checked in various ways. The figures are then combined with the numbers occupied in each industry, as given by the census, and a total for wages is obtained, allowances being made for changed rates and other factors.

Our next step is to discuss various possible definitions of the National Income. The National Income might mean the total income arising within a country in a year. Let us adopt the terminology of Bowley and Stamp¹ and call this A. Some of A belongs to persons living abroad. Let us call this B. $A - B$ will thus be the home-produced income belonging to home residents. But some of these residents will also receive income from abroad, which we may call C. Therefore $A - B + C$ will be the total income accruing to residents from whatever source and reaching them individually or collectively. It may be divided into two parts—individual and corporate income. Large sums are now annually assignable to non-personal income, of which undistributed profits are an example. Let us call non-personal income D. The total income accruing to residents individually is therefore $A - B + C - D$. Here there are four possible definitions of the national income, and we must be careful in what follows to make clear, whenever we use the term, in what sense it is used.

The distinctions between these four definitions of the national income are easy to grasp. There is a fifth definition which is not at first sight so clear. It is, however, of considerable importance. We may attempt to estimate what Bowley and Stamp call the Social Income, which they define as the aggregate of individual and collective incomes less incomes received by compulsory reductions from other incomes in return for

no services or services not rendered in the year in question. Using the previous notation, an amount E has to be taken from $A - B + C$ to arrive at the Social Income. What then is E ?

The nature of E is best understood if we recall what was said on a previous page about double counting. It was pointed out that the £50 paid by a father, whose total spendable income was £800 a year, to a school-master for educating his son was counted both in the income of the father and in the income of the school-master. This double counting is legitimate. The £50 represents both part of the money value of the services rendered by the parent as a business man and part of the money value of the services of the school-master as a teacher. There are, however, other forms of double counting which are not legitimate when we attempt to measure the value of real economic goods and services. There are various ways in which part of the income of certain persons is taken and given to other persons. The former receive no goods or services when they part with their money, and the latter render no services and produce no goods in return for this money. The transaction is in the nature of a mere transfer. Clearly enough the money transferred should only be counted once. It is legitimately counted as part of the income of those who have rendered services or produced goods in return for it, but it is not legitimately counted as part of the income of those who have done nothing for it, or at least nothing within the year.

The collection and payment of the interest on the National Debt is the best example of transfer on a large scale. The interest amounted to £268 millions in 1924.⁵ This sum was collected by the State through taxation and handed over to holders of Government securities. Sums paid in income-tax may not be deducted from income. If, therefore, we add up the incomes of taxpayers we shall include the £268 millions twice over, first before the Government takes it and secondly after the Government has given it to bond-holders. This would not be

justifiable. That this is so is clear if we imagine that all taxpayers hold Government securities in exact proportion to the amount paid in taxes. In that case the Government would first take a certain sum from each taxpayer and then hand back to him the same sum. It clearly would not be right for each individual taxpayer to count the sum more than once, and the total £268 millions would in that case therefore not enter twice into the national income. In actual fact taxpayers do not hold Government securities in proportion to the amounts they pay in taxation, and the Government therefore has to effect a redistribution of £268 millions to the extent to which this is not so. But this redistribution adds nothing to the national income. Therefore we must take steps to ensure that, when we are estimating the real social income, processes of mere redistribution are not allowed to increase erroneously the national income. Unless such steps are taken, the larger our National Debt the greater our national income will appear to be.

The payment of interest on the National Debt is not the only method whereby redistribution is brought about. Other examples are the payment of war pensions and old-age pensions. They are paid in return for services wholly in the past, and they amounted to about £93 millions for the year 1924-5.⁵ They are unlike the National Debt in that the latter has to be returned as income by those who receive it, in the form of interest on the Government securities they hold. The Chancellor of the Exchequer sees to it that, if liable, this income is twice taxed: he taxeth him that gives and him that takes. But pensions are for the most part paid to those who are not in that happy—or unhappy—class which is liable to income-tax. The consequence is that they are only counted once as income, namely as part of the incomes of all who are taxed to provide the wherewithal for their payment. It follows that if pensions are not reckoned more than once there is no need to make any deduction on account of them from the total

national income computed in the manner described. If, however, desiring to obtain a complete inventory of everybody's income, we do include them—following the procedure adopted by Bowley and Stamp—then there is double counting, and we must subtract them in order to arrive at the net social income. Otherwise, the more pensioners we have, the richer we shall appear to be.

Redistribution is also effected by other means, but for various reasons no account need be taken here of transfers other than those resulting from the payment of interest on the National Debt and of pensions. The value of E therefore is £361 millions in 1924 (£268 millions + £93 millions).

TABLE XLV ⁵*Income of the United Kingdom (£ millions)*

		1911 (Including * S. Ireland)	1924 (Excluding S. Ireland).
A . . .	Total Income arising within U K.	1,904	4,008
B . . .	Income belonging to Non-residents . . .	6	56
A—B . . .	Home-produced Income belonging to Home Residents . . .	1,898	3,952
C . . .	Income from abroad . . .	200	212
A—B + C . . .	Total Individual and Corporate Income from all Sources belonging to Resi- dents . . .	2,098	4,164
D . . .	Corporate Income and Undivided Profits . . .	115	205
E . . .	Income transferred without Actual Service in the Year . . .	36	361
A—B + C—D . . .	Total Increase accruing to Individual Residents . . .	1,983	3,959
A—B + C—E . . .	Social Income . . .	2,062	3,803
A—B + C—E . . .	Social Income . . .	(Exclg. S. I.) 1,988	(Exclg. S. I.) 3,803

Table XLV gives the results of the estimates made by Bowley and Stamp for the National Income defined in the several ways mentioned on pp. 95, 96. The Social Income is the one which is of most interest to us. It amounted to £1,988 millions in 1911 and to £3,803 millions in 1924 for the United Kingdom, excluding

S. Ireland. This is an increase of 90 per cent., but since the effective increase in prices between the two dates was also just about 90 per cent., it follows that the *real* social income was practically unchanged. If the figures are related to population it is found that the real income per head fell by 5 or 10 per cent. This was due to a decrease in the income coming to residents in this country from capital invested abroad. Real home-produced income was very nearly the same per head in 1911 and in 1924, a remarkable and unexpected fact.⁶

It is, however, with the distribution rather than with the size of the national income that we are concerned. Let us ask what would have happened if the social income had been equally distributed in 1924. The average income per head of population would have been about £84 and the average income per occupied person would have been about £185. But these are somewhat meaningless figures, because families, not persons, are the true social units. We find that the average family income works out at about £365, or £1 a day, in 1924.⁷ But this result again is misleading, for if every family was free to spend its own share of the national income entirely as it pleased there might be nothing left to meet the expenses of Government, and nothing saved and invested to keep the wheels of industry in motion, so that very soon the whole social system would come to a full stop.

In order to reach a more illuminating figure it is necessary to start, not with the Social Income, but with the Total Income ($A + C - B$) before the transfers (E) have been subtracted from it. This amounted to £4,164 millions for Great Britain and N. Ireland in 1924, and Bowley and Stamp suggest that it might be analysed thus :

Paid in rates and taxes, £855 millions ; saved, £475 millions ; spent freely, £2,835 millions. If, then, the last total, £2,835 millions, is divided equally among $10\frac{1}{2}$ million families, the sum available for each is about

£270 per annum. Now the average earnings per wage-earning family, we are told, amounted only to £190, and this was before rates and taxes were deducted.⁸ We thus get some idea how far, on the average, wage-earners fall short of their share of the freely spendable part of the national income, assuming the principle of equal division were adopted.

These calculations provide no forecast of what would happen if equal distribution was brought about suddenly, because they assume, what would certainly not be the case, that the social income would be unchanged. But they do serve one useful purpose. They emphasize our poverty. We cannot all be rich in the absolute sense. There is no cure for poverty through mere redistribution of our existing national income. This is no argument, it may be observed, in support of the present distribution. It does not touch the view that there should be no cake until all have bread.

It is a fact of painful familiarity that the distribution of the national income is unequal. Bowley estimated that in 1910 all income receivers could be divided into two classes, 1.1 per cent. who took 30 per cent. of the whole national income and 98.9 per cent. who shared the rest between them. The national income here apparently means that part of it accruing to individuals. Another division of the same total showed that 4.4 per cent. went to only 5½ per cent. of all income receivers.⁹ How has the position altered since that date? Unfortunately Bowley and Stamp do not give similar figures for 1924, but they do indicate broadly how the three main classes of income—wages, other earned income, and unearned income—stand. The position is shown in the table on p. 101.

The expression 'earned' income is used here in the technical sense employed in assessing income-tax, so that, in addition to wages and salaries, it includes the income derived by persons from the employment of their own capital. There has been a tendency of late for private firms to be transformed into private companies, with the

result that some income which before was not distinguished from ordinary salary would now be received in the form of interest on invested capital: that is, it would pass automatically from the earned to the unearned category without any real change in its source.

TABLE XLVI¹⁰

Percentage of Home-produced Social Income taken by	1911 (Including S. Ireland)	1924 (Excluding S. Ireland)
Wages	43	44
Other Earned Income	32½	34
Total Earned Income	75½	78
Unearned Income (less Transfers)	23½	18½
Transfers (State Pensions, &c.)	1	3½
Total Unearned Income (before Deduction of Tax)	24½	22
	100	100

We are told that if allowance could be made for this it would probably be found that the proportion of earned income (other than wages) to the total had increased more in the thirteen years than the above figures suggest.

We cannot do better than let the authors we have been quoting sum up the position in their own words:

'The distribution of income between wage-earners, other earners, and unearned income was changed slightly in favour of the earning classes. Manual workers on the average make slightly increased real earnings, and there have also been transfers for their benefit in insurance schemes and other public expenditure. In addition they have the advantage of a reduction of about one-tenth of the working week. This change can be connected with the reduction in the real income derived from house property and investments bearing fixed rates of interest. The indications are that profits as a whole, reckoned before tax is paid, form nearly the same proportion to total income at the two dates. Within the wage-earning classes women and unskilled workers have received a substantial real advance in wages; the great majority

of skilled workers made at least as much (after allowing for the rise of prices) in 1924 as in 1911. When the full effects of taxation are taken into account, the real income available for saving or expenditure in the hands of the rich is definitely less than before the war.'¹¹

It may be worth while to examine further the distribution of incomes among that small but relatively wealthy section of the population who enjoy the privilege of paying super-tax, since they occupy a place in the imagination of the public in proportion to the size of their incomes rather than to the smallness of their numbers. The distribution is shown in Table XLVII.

TABLE XLVII¹²

*Distribution of Incomes of Persons Assessed to Super-Tax.
(Great Britain and N. Ireland, 1924-5.)*

<i>Income Class</i>		<i>Number of Persons.</i>	<i>Total Incomes Assessed</i>
<i>Exceeding</i>	<i>Not Exceeding</i>		
£	£		£M.
2,000	5,000	63,275	192
5,000	10,000	16,940	116
10,000	20,000	6,263	85
20,000	30,000	1,520	36
30,000	40,000	557	19
40,000	50,000	301	13
50,000	75,000	307	18
75,000	100,000	114	10
Exceeding 100,000		138	28
Total		89,415	517

In this table we have details concerning the total number of persons with incomes of more than £2,000 a year. We learn, for instance, that there were in 1924-5 138 persons with an income of over £100,000. But these rich persons in all do not exceed in number the total population of a country town of moderate size. Their swift journeyings about the country and excursions to the Riviera, the chronicles and pictures of their doings, all combine to magnify their numerical importance. They appear to constitute an army. It is, however, a stage army—a few battalions appearing again and again

in new and striking postures. Disproportionate as is the share of the national income which falls to them, there is no vast source of wealth whence, if it was shared out, we could all achieve even a moderate competence. The rich, as has been said, are like the Alps, which tower in their magnificence above the plains ; but if they were razed and the material which constitutes them spread evenly over the surface of the land there would be a rise of but a few inches in the general level.

It has already been stated that the share of the national income going to the very rich is less than it was before the war. The proportion of the national income going to super-tax payers in 1911 has been estimated at 8 per cent. The super-tax limit was then £5,000. If allowance is made for the change in the value of money the comparable figure in 1924 was £9,500. The proportion of persons with incomes above this amount in 1924 was $5\frac{1}{2}$ per cent. 'It would appear, therefore,' say Bowley and Stamp, 'that, measured by percentage, and allowing for the legal avoidance of super-tax, some ground has been lost by this section in the period of 13 years. If deduction is made for the greater progression in the present direct taxation, the percentage of *net* income going to this richer section is considerably less than it was in 1911.'¹³

If by the very rich we mean not super-tax payers but persons with £10,000 a year or over, the following details relating to nature and source of income are not without interest. The percentage of such persons having investment income only, in 1913-14, was 27.0, and in 1922-3 29.4. The percentage of earned income to total income was 27.7 in 1913-14 and 28.7 in 1922-3, leaving 72.3 per cent. and 71.3 per cent. respectively as investment income.¹⁴ These last figures are further analysed in the table on p. 104 according to the source from which income was derived.

It is not strictly within our province to deal with matters of history. We may, however, in conclusion refer to Sir Josiah Stamp's interesting comparison be-

TABLE XLVIII ¹⁵

Percentage of Total Income and Individuals according to Source of Income.

<i>Source</i>	<i>Per cent. of Total Income</i>		<i>Per cent. of Total Individuals</i>	
	1913-14.	1922-23.	1913-14	1922-23.
Mines and Manufactures .	6.9	6.9	10.1	8.1
Distribution and Transport .	8.2	8.9	15.3	12.3
Professions, Finance, &c. .	8.3	5.1	12.1	11.0
Employments, Directors' Fees, &c.	4.3	7.8	35.5	39.2
Total .	27.7	28.7	73.0	70.6

tween 1800 and 1914. His calculation shows that, poor as we may still be, things have improved in the most marked fashion since the beginning of the nineteenth century. Whether the improvement has come about because or in spite of the prevailing economic 'system' is another matter. The fact alone is relevant here. The national income in 1800 was probably somewhere about £230 millions, and in 1913 was roughly £2,300 millions. During this period income had increased tenfold. Population, however, had only increased fivefold. But this is not all. The index number of prices for 1801 was roughly twice as great as for 1913. Money had thus doubled in purchasing power. Further, the evidence is that the increase had been shared evenly by all classes in the population. Therefore it is broadly true to say that the ordinary person in 1913 was four times as well off in real commodities as the person in the corresponding place in the social scale in 1801.¹⁶

THE NATIONAL WEALTH

IT is a nice question whether it is more logical to consider national wealth before or after an inquiry into the national income. There are arguments for either procedure. The present procedure is followed because wealth is accumulated out of income saved. We found when dealing with income that, in spite of the vivid apprehension we all have as to the meaning of that term for us, there are obscurities inhering in the term 'national income'. It is more difficult to define wealth than income, and again more difficult to measure wealth than income. Nevertheless, the matter is both interesting and important, and we are led to inquire into the amount of the national wealth, to ask what are its chief constituent elements, and, so far as it is individually held, how ownership is distributed.

Let us begin with a definition. National wealth is here used to mean the sum total of the exchangeable and transferable possessions of the inhabitants of this country, whether individually or corporately held, including their foreign possessions and excluding wealth within the country held by foreigners. This definition requires certain amplifications and qualifications. (1) The wealth included is such as has money value and is exchangeable, though all things which possess these qualities do not come under the head of national wealth (see 3 below). Thus objects—such as the air we breathe—which are desirable and even necessary, but so common as not to be exchangeable for money, are excluded. Possessions again which are valuable but 'internal', such as the special skill of a doctor, are excluded because, as is the case with all 'internal' possessions, they are neither exchangeable nor transferable. (2) If by capital is

meant possessions employed as agents in production, as we used to be told in the older economic text-books, then capital is not synonymous with wealth as the term is used here. Wealth includes all possessions regarded as results of production and conforming with the definition given above. Thus all capital is wealth but all wealth is not capital. (3) What may be wealth to the individual may not be wealth to the State. War Loan, to the individual who owns it, has money value and is exchangeable: to him it is wealth. But to the State it is the very antithesis of wealth, namely a debt, for it stands in place of wealth which has been taken from certain citizens and consumed in the prosecution of war. There remains an obligation on the part of the State to pay interest to the lenders or to repay the money value of the wealth borrowed. But while the lenders may regard the recognition of this obligation as an addition to their individual property, they should not regard it as wealth in the corporate sense. In any case the statistician must not do so, because it is not an addition to the sum total of the wealth of all the persons within the country; it is a mechanism for the transfer of wealth from certain citizens to others.

It has been said that wealth is wealth because it satisfies human wants. A canal that has been superseded by a railway and is no longer used satisfies no wants and does not enter into the national wealth. We have agreed, however, to exclude certain possessions which do satisfy wants—possessions which are 'internal' and therefore not transferable, and possessions that are so common as to have no money value and are therefore not measurable by the only measuring rod that we can employ, namely money. But the measurement of wealth thus defined is no simple matter. It might seem at first sight that the obvious method would be to go round and make an inventory of all the possessions falling under wealth as we define it, setting a money value to each of them. But it appears on reflection that this is not what is ordinarily done in respect to certain classes

of possessions. When we attempt to value a boot-making business we do not merely make an inventory of the buildings, machines, and stock on hand. We investigate the financial position of the business, calculate its profits at the present time, and estimate its future profits. Our valuation is made by capitalizing the probable future profits at so many years purchase. In other words, we treat the business as a 'going concern', and there is a distinction between what we may call the 'going concern' and the 'inventory' methods of estimating wealth, although, if our information was complete, they should lead to the same result.

It seems clear that the 'going concern' method promises to give us more nearly what we want than the 'inventory' method, because it does attempt to measure the capacity of possessions to satisfy human needs in the future from a wider point of view than if they are regarded as mere objects in an inventory. The 'going concern' method, however, is not applicable to all classes of possessions. We cannot estimate the value of roads as 'going concerns', and the same applies to most Government and Local Government possessions. We can attempt to ascertain what it has cost to make the roads or what it would cost to replace them. We can do no more. Again, such personal possessions as furniture have 'inventory' value only. It therefore follows that we must use both methods in estimating the national wealth, the 'going concern' method where it is applicable and the 'inventory' method where the 'going concern' cannot be used.

It is interesting to observe that the 'going concern' method might be employed to estimate the value of certain classes of possessions which we have decided to exclude. We have decided to exclude the doctor's skill. But we could ascertain the earning power which he possesses owing to his skill, calculate his expectation of life, and upon this basis capitalize his estimated earning power and add it to the national wealth. This is, in fact, the rational method of procedure, and unless we do take

account of and capitalize 'internal possessions' we are omitting very important national assets. But our procedure must not depart too far from the practice of everyday life. If it does so, the national wealth for which we give a figure will not correspond with the ordinary conception of what constitutes wealth. It is not usual to regard human capital as part of the national capital and therefore we omit it.

With these considerations in mind let us survey the data available for the making of an estimate of the national capital. To begin with we have the annual income-tax returns rendered by the Commissioners of Inland Revenue. All income assessed for income-tax purposes is classed in one of five schedules. The classification is broadly as follows :

- Schedule A. Realty.* Income from the ownership of lands, houses, &c.
- B. Farming.* Income from the occupation of land.
- C. Government Securities.* Income from dividends, annuities, &c., payable out of public funds.
- D. Business and Professions.* Income in the form of profit or salary.
- E. Salaries of Officials.* Income in respect of any public office or employment by any corporation.

The 'going concern' method can be applied to these data. It is possible to capitalize the income arising under these different heads at so many years' purchase, according to the class of property concerned, and to add the totals to arrive at the national wealth. This is in fact what has been done in the estimate quoted below. Thus, twenty-one years' purchase of the gross assessment of lands has been taken. For information as to the number of years' purchase appropriate to different classes of wealth, and as to other aspects of the methods employed to capitalize income, the reader must be referred

to Sir Josiah Stamp's *British Incomes and Property*, especially Chapter XI. It is his results which are given below.

There are, however, two important points to notice. The 'going concern' method, for reasons already mentioned, is not consistently applied. The income arising under Schedule E, for instance, is not capitalized. No addition is made to the national capital on account of the income of public officials and employees of corporations classed under this heading. To capitalize this income would be to capitalize men. The incomes of doctors and other professional men fall under Schedule D, and the method employed in this case is to capitalize the income and take that portion of the sum arrived at which is estimated to represent the tools and other possessions which professional men employ in order to practise their skill. Thus an attempt is made to limit the application of the 'going concern' method to these income-tax figures in such a manner as to exclude human capital. The second point to observe is that the whole interest appearing under Schedule C is not capitalized. The interest returned under this Schedule is not only the interest payable out of the revenue of the United Kingdom but also that payable out of the revenue of any foreign or Dominion Government. It is legitimate to capitalize the interest on the latter, but not the interest on the former. If we were to capitalize the interest on the former, we should arrive at a sum which would represent in part the money borrowed by the State and expended in war, and therefore representing no material possessions, and in part the money used to construct roads, build dockyards, war-ships, and arsenals, which Government possessions appear as a separate item in our list of assets going to make up the national wealth. The value of national and Local Government property is in fact arrived at by the 'inventory' method and shown apart from the rest. Therefore to capitalize the interest on Home Government securities would result both in counting the real possessions of the Government twice

over, and in crediting the community with other possessions which have been used up in former years.

This method of capitalizing future prospects but omitting human capital, is subject to certain defects, and circumstances may arise in which no increase in the valuation of the national wealth may be shown where a real increase has taken place. Thus, savings used to promote the health and education of children will not show in the balance-sheet, though they represent true additions to the national assets. If these savings were used alternatively to build houses, then an increase would be shown. Again, changes in industrial organization may cause increases or decreases in the valuation though in fact the national assets remain the same in spite of these changes. Thus, as Sir Josiah Stamp points out, 'a singer may earn £1,000 a year and the capital value of his assets will not appear in the balance-sheet. Like the surgeon's skill, they rank as internal possessions. But if a company is formed with a capital of £10,000, which is paid over to the singer, who in accordance with an agreement pays his income of £1,000 a year to the company, then the capital value of his powers will be included, because the method of valuation adopted requires the future prospects of all companies to be capitalized and added to the estimate.'¹

There are certain items in the list of national assets which yield no income that is recorded in the income-tax returns. Of these the chief are central and Local Government property, movable property such as furniture, and the capital assets of non-income-tax-paying classes such as the stock-in-trade of small shopkeepers. The valuation of these assets can only be made by the 'inventory' method. Data for this purpose are scarce. The problem has been considered by Sir Josiah Stamp, and we quote his figures.

The following table gives a valuation of the national wealth in 1914 adapted from Sir Josiah Stamp.² The table differs from that given by Stamp in two respects. In the first place certain items have been combined.

In order to show what items have been combined which appear separately in Stamp's table, numbers have been placed against each item corresponding to the order in which the items appear in his table. Secondly, the figures for the National Debt and Government property have been treated in a different fashion. We omit the National Debt and give a different figure for Government property. The reasons for so doing are explained below.

TABLE XLIX

Estimated Wealth of the United Kingdom in 1914.

	£ M.	% of Total
1. Lands	1,155	8 1
2, 3 Houses, &c	3,352	23 4
4 Farmers' Capital	340	2 4
6 Railways in the United Kingdom	1,143	8 0
7 " out of " " "	655	4 6
8, 9. Quarries, Mines, and Ironworks	216	1 5
10, 11. Gas and Waterworks, Canals, Docks, &c	460	3 2
12, 13 Foreign & Colonial Securities & Coupons	1,004	7 0
14 Other Profits and Interest	276	1 9
15. Trades, Businesses, and Professions not otherwise detailed (allowing for evasion)	2,770	19 4
16. Income accruing abroad and not remitted	400	2 8
17. Income of Non-taxpayers derived from Capital	200	1 4
18 Movable property not yielding Income	800	5 6
19. Government and Local Government Property	1,548	10 8
	<u>14,319</u>	<u>100 0</u>

It is again necessary to refer the reader to Sir Josiah Stamp's book for a full explanation as to what is included under the different headings in this table, and a warning must be issued against the use of the table without due care. To give one instance, farm-houses and farm buildings are included under 'Lands' and not under 'Houses', whereas dwelling-houses generally and factory buildings are included under 'Houses'.³ Subject to these warnings the percentages shown in the last column are interesting as giving a broad indication of the relative amounts which different types of capital form of the aggregate. Perhaps the most remarkable fact is that buildings represent nearly a quarter of our national wealth. Clearly the re-housing of the population, a problem additional to that of providing the new houses

now required, is a matter of the greatest magnitude. Furniture also, forming as it does the chief item under the head 'movable property not yielding income', comes to a surprisingly large figure.

In Table XLIX there appears an item, Government and Local Government Property, valued at £1,548 millions. This represents the value of central Government property, such as the navy, military works and arsenals, telegraphs, telephones, and Suez Canal shares, and of Local Government property, such as roads, common lands, parks, bridges, and sewers.⁴ It is obvious that a valuation of property of this nature, which is not sold in the market, is very difficult to make. The figures must be more or less nominal. Further, all central and Local Government property is not included under this heading, because municipal enterprises, such as gas- and water-works, are included under another heading with commercial enterprises of the same nature. It would appear, however, that more than one-tenth of the wealth of the United Kingdom was at that date in the hands of the central and Local Government authorities. To the extent however to which loans for productive purposes are outstanding, this property is encumbered. Whether, therefore, we judge by the proportion of occupied persons employed by the central and Local Government or by the amount of wealth held by these authorities, we have advanced some way towards 'Socialism'.

In the above table the National Debt does not appear as an item in the national wealth. The National Debt is compounded of two elements. Part of the money has been borrowed and expended in war: in respect of this part of the debt no tangible wealth exists. Part of the money has been used for constructive purposes: so far as the latter is the case, however, the tangible wealth resulting has been valued and included as Central and Local Government Property. If this element of the National Debt was included there would be double counting.*

* Sir Josiah Stamp includes in his list of items composing the National Wealth an item for the National Debt (B) and an item for Government and Local Government

We therefore omit altogether the National Debt from the list of items composing the national wealth.

No detailed estimate of post-war wealth is available. Fluctuations in capital values due to changes in the income yield of different kinds of capital and the unstable conditions which have prevailed, together with other factors in the post-war situation, render the making of any estimate very difficult, if not impossible. Sir Josiah Stamp thinks that the national wealth in 1920 cannot have exceeded £19,000,000,000 or £20,000,000,000, and was probably less, and that the aggregate of individual wealth has moved from about £11,000,000,000 in 1914 to about £15,000,000,000 in 1920. This increase, however, is wholly in money value. The real increase in his opinion is 'certainly almost negligible'.⁵

Evidence as to the distribution of wealth can be obtained from a table prepared by the Board of Inland Revenue in their memoranda on the Taxation of War Wealth. The table, which is based upon Estate Duty Statistics and Super-Tax Samples, refers to 1919. It is adapted by Sir Josiah Stamp somewhat as follows:

TABLE L^a
United Kingdom, 1919.

<i>Fortune in £(000s)</i>	<i>No of Persons</i>	<i>Amount held in £M.</i>
Over 1,000	322	681
750 to 1,000	230	195
500 750	653	405
250 500	2,971	1,020
100 250	11,200	1,615
50 100	20,570	1,432
25 50	48,810	1,731
10 25	138,460	2,202
5 10	169,040	1,217
Under 5	?	4,555
		15,053

From this table it appears that about two-thirds of the wealth is held by just under 400,000 people (or less than

property (C). His method is to obtain a figure for the inventory value of Government Property (A) and then to subtract B from A, calling the residue C. Thus his method, which for his purpose is no doubt to be preferred, gives a figure C which represents the surplus of the value of Government property over the amount of the Government debt. For our purpose, that is to say when we wish to draw attention to the total value of Government property, it seems best to give the figures as in Table XLIX.

1 per cent. of the total population) and one-third of the wealth by 36,000 people (or less than 1 in 1,000 of the total population). This method of expressing the distribution, as was indicated when dealing with the national income, may be somewhat misleading. It takes no account of the fact that the ultimate units in society regarded in relation to wealth are families rather than persons. The equal distribution of property implies an equal holding among heads of households rather than an equal distribution among all living persons, including babies in their cradles. It gives a more just impression to take the percentage of occupied persons over 20. We then estimate that about $2\frac{1}{2}$ per cent. of occupied persons over 20 hold about two-thirds of the wealth, and that about $2\frac{1}{2}$ in 1,000 of occupied persons over 20 hold one-third of the wealth.⁷

Professor Henry Clay has made a closely reasoned estimate of the distribution of wealth individually held in 1912 for England and Wales, and has also attempted an estimate of the position in 1920, though owing to the nature of the data available the same reliance cannot be placed upon the latter estimate as upon the former.⁸ The method employed in making these estimates was briefly as follows.—All estates above £100 are liable to estate duty, and detailed information is to be found in the Annual Reports of the Commissioners of Inland Revenue as to the estates coming under review each year. It is known that about 3 per cent. of the total wealth in individual hands passes by death every year, and thus the total wealth in the hands of the living who possess more than £100, and its distribution among them, can be roughly determined.⁹ It remains to estimate both the wealth in the hands of those who own less than £100 each and the number of those holding wealth in these small amounts. A figure for the aggregate wealth held in small amounts is obtained by estimating the value of the furniture, tools, and personal effects in the hands of this section of the population, and by summing-up their collective savings in savings banks and provident

societies.¹⁰ The number of those among whom this wealth is distributed is taken as the number of persons over 15 who were returned in 1911 as occupied, less the number who owned more than £100 each.¹¹ By this method Professor Clay was able to prepare the following table:

TABLE LI¹²

Estimated Distribution of Wealth, 1912-13 and 1920-1.

Range	1912-13		1920-1		Cumulative Percentages.			
	No.	Amt	No.	Amt.	1912-13.		1920-1	
		£M		£M	No	Amt	No	Amt
Under 100	13,684,000	470	13,360,000	912	84.4	6.8	75.4	7.6
100-500 net (1912)	1,428,000	394	2,177,750	548	93.2	12.4	87.7	12.1
100-500 gross (1920)								
500-1,000 (1912)								
100-1,000 (1920)	465,500	300	1,051,900	764	96.1	16.6	93.7	18.4
1,000-5,000	449,000	1,086	818,975	2,116	98.9	32.2	98.3	36.0
5,000-25,000	144,000	1,628	244,720	3,164	99.8	55.7	99.7	62.3
Over 25,000	37,720	3,085	48,817	4,534	100.0	100.0	100.0	100.0
Total	16,208,400	6,966	17,702,000	12,038				

NOTE — Estates of a net value of £100-£500 are included with other estates below £500 in 1912-13, but with estates under £1,000 net value in 1920-1

When comparing the totals given by Professor Clay with those given by Sir Josiah Stamp it must be borne in mind that, whereas the latter's estimate is for the United Kingdom in 1914, the former's estimate is for England and Wales in 1912. Moreover, Professor Clay takes individually-held wealth alone into consideration, and bases his valuation upon estate duty returns. It is well known that valuations for estate duty purposes are generally undervaluations, and this the author clearly recognized. His purpose, however, was to discover the distribution rather than the actual amount of national wealth.

When we come to compare the two post-war estimates from the point of view of distribution we find close agreement. According to Professor Clay's post-war estimate 64 per cent., or rather less than two-thirds of the wealth, is in the hands of 17 per cent. of persons holding property.

These persons form roughly one-half of the population, and therefore, according to this estimate, rather less than two-thirds of the wealth is in the hands of 0·85 per cent. of the whole population.

When Professor Clay's estimates for 1912-13 and 1920-1 are compared, it appears that wealth has become somewhat more widely distributed since the war. This would seem to be a result of the present high progressive taxation. It would also appear that those who made money during the war made it at the expense of persons in the same economic class, and not at the expense of the poor. It may be mentioned that, so far as evidence is available, wealth is more concentrated in this than in any other country.

The estimates for the distribution of wealth given in this chapter invite comparisons with the estimates for the distribution of income given in the last chapter. Professor Clay has compared his estimate for the distribution of capital in 1912 with Professor Bowley's estimate for the distribution of income in 1910, as follows : '94·5 per cent. of persons have 56 per cent. of the national income, while 96·2 per cent. of persons have only 17·22 per cent. of the national capital ; 98·9 per cent. of persons have 71 per cent. of income, while the same percentage of persons have only 33 per cent. of the capital.'¹³ Wealth is, therefore, far more unevenly distributed than income in this country.

XI

EDUCATION

UP to this point we have been engaged in describing where the inhabitants of this country live, how they are occupied, and what incomes they receive. Nothing has yet been said as to how men get sorted out into different occupations. It is in general clear, however, that a man's walk in life is determined partly by opportunity and partly by natural gifts. Something will be said later as to the distribution of natural gifts in the community. Can anything be said as to the distribution of opportunities?

The forms in which opportunity presents itself are exceedingly various. They vary according to the locality in which a boy is brought up. They vary even more with the social connexions he is able to establish. It is obviously impossible to obtain any statistical measurement of such matters as these. There is, however, one form of opportunity that we can study statistically, and that is education. The importance of education in determining a man's place in life is obvious. A boy who has not been to a secondary school must either possess very unusual natural gifts or meet with some very uncommon opening if he is to become a professional man.

It is difficult to summarize the educational system in this country and not to be misleading. But it may be said that for the children of the wealthy there are preparatory schools, public schools, and the ancient universities. The cost of such an education, lasting over perhaps fifteen years, is so high that it is out of reach of all but a small section of the population. It should, however, be remembered that a number of scholarships are offered at public schools and universities which cover the whole or part of the cost. For the rest of the population there is the State system of elementary schools, which may lead

on to secondary schools and thence to a university. These two systems, if that term is applicable to them, are not wholly separate. Some public school boys go to modern universities and many secondary school boys go to the ancient universities. Further, as will be pointed out later, the term public school bears no clearly defined meaning. Nevertheless, there is a distinct cleavage between the two systems, one for the favoured few and the other for the remainder.

Attendance at elementary schools, if no other education is obtainable, is compulsory, and it is free, whereas attendance at secondary schools is not compulsory and only in part is it free. Free secondary education is, in fact, only available to a small extent for ex-elementary school pupils, and free university education again is only available for a small proportion of ex-secondary school pupils. In this connexion the term free is ambiguous. It may mean merely remission of fees, or it may mean maintenance in addition. But even when it implies maintenance it demands sacrifice, since the scholar postpones the attempt to obtain gainful employment. It follows, therefore, that since under the first system education is very costly and has almost wholly to be paid for, and under the second system advanced education is often paid for, at least in part, educational opportunities fall preponderantly to the richer section of the population. The fortunate position in which the sons of the richer parents find themselves in regard to this valuable opportunity accounts in large part for the fact that they obtain a share of the more eligible positions in adult life quite out of proportion to their numbers.

We have been speaking so far of the whole-time educational system. There are also numerous forms of part-time education, both for adolescents and adults. Of them something will be said at the end of the chapter. The whole-time system must occupy most of our attention, and there are two chief objects at which we aim. We must attempt to summarize the full-time system and inquire what proportion of persons at different ages are

following full-time courses. We must also attempt to analyse the working of the free-place and scholarship system, since this aspect of our educational organization represents a deliberate attempt to equalize opportunity.

As a preliminary to the examination of the full-time educational system of England and Wales we have the following information relating to the year 1921: (1) the total population at each year of age; (2) the number attending educational institutions whole or part time at each year of age;¹ (3) the number on the registers of public elementary schools.² Combining this information we get the following table, which shows the proportion per 1,000 of the population between the ages of 9 and 20 who in 1921 were attending (*a*) public elementary schools, (*b*) other schools and universities, and (*c*) no educational institution.

TABLE LII

Proportion per 1,000 of the Population, at different Ages, attending or not attending Educational Institutions.

(England and Wales, 1921.)

Age	Proportion attending		
	Public Elementary Schools	Other Schools, &c	No Educational Institutions
9-10	913	47	40
10-11	912	51	37
11-12	892	73	35
12-13	853	115	32
13-14	684	186	130
14-15	160	230	610
15-16	10	150	840
16-17	1	92	907
17-18	—	58	942
18-19	—	33	967
19-20	—	23	977

The position disclosed in this table can be better appreciated by reference to the diagram, where the dark part indicates that portion of the population between the ages of 9 and 20 which was not receiving education of any kind, whole or part time, in school or college.

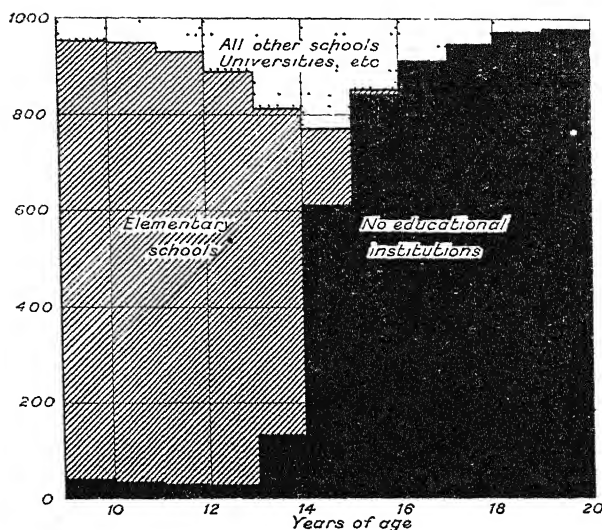


Diagram to illustrate Table LII

Let us now narrow the inquiry and review the full-time system of education as given in elementary schools, grant-aided secondary schools, junior technical schools, and pupil teachers' centres. The numbers attending are shown in Table LIII for certain important age groups. It will be noticed that the great majority of pupils in these institutions are less than 16 years of age.

TABLE LIII¹

England and Wales, 1921-2.

Number of Pupils (000s) on the Registers in Certain Types of Schools in Various Age Groups.

Age.	Elementary Schools	Grant-aided Secondary Schools.	Junior Technical Schools and Pupil Teachers' Centres.
0—5	159	—	—
5—10	3,072	23	—
10—12	1,296	43	—
12—14	1,174	120	5
14—16	159	117	7
16 and over	1	52	4
Total	5,861	355	16

This table brings out some important facts regarding, for instance, such questions as the age of entrants to secondary schools. Leaving these matters aside for the moment, let us pursue another aspect of the situation. If we exclude from the totals in Table LIII those who are over 17 years of age, we have in elementary schools 5,861,000 as before, but in grant-aided secondary schools 334,000 only, and in junior technical schools and pupil teachers' centres 15,000, making a total of 6,210,000 pupils under 17 years of age in these institutions.³ But the total known to have been following any kind of full-time educational instruction under 17 in 1921 was 6,526,000.¹ How is the gap of 316,000 accounted for? We can account for 47,000 pupils: they are in secondary schools on the efficient list, but not on the grant list; another 6,000 are in preparatory schools on the efficient list.⁴ Such schools have been inspected by the Board of Education and recognized as efficient, but they do not earn a grant, though the secondary schools might do so if certain conditions as to management, free places, religious tests, and scales of fees were satisfied.⁵ The inclusion of the pupils in these schools reduces the difference to 263,000, and this must represent the number of pupils in preparatory and secondary schools which either have not been inspected by the Board of Education or have been inspected but have not been recognized as efficient. In this fashion we can construct the following table showing in what institutions all the scholars under 17 years of age, known to have been following any kind of full-time educational courses, were found in 1921:

TABLE LIV.

Full-time Pupils under 17 years of Age. England and Wales, 1921.

<i>Nature of Schools</i>	<i>No of Pupils (000s).</i>
Elementary	5,861
Secondary on the Grant List	334
" " Efficient List	47
Preparatory	6
Junior Technical and Pupil Teachers' Centres	15
Other Secondary and Preparatory	263
	<hr/> 6,526

An inspection of this table will at once suggest the question—why have public schools been omitted? The answer is that they have not been omitted. Some appear under 'Secondary Schools on the Grant List', others under 'Secondary Schools on the Efficient List', and others again under 'Other Secondary Schools'. They cannot, however, be separated out. The first difficulty is that of definition. The only available definition appears to be that a public school is a school the head master of which may attend the Head Masters' Conference. There are 137 such schools in England and Wales.⁶ Even if this definition be accepted, a second difficulty faces us in the fact that we have no adequate information concerning these schools. Some particulars about them are to be found in the *Public Schools Year Book*, but, as they are not printed in a uniform fashion for all, it is impossible to deal with them as a group, and this is unfortunate in view of the prestige which they enjoy. When we remember the importance attributed to public schools, some persons being of opinion that they hand on to successive generations all the best traditions of our race, and others viewing them as the seed-beds of idleness, incompetence, and snobbishness, it is remarkable that we should be wholly ignorant as to the number of pupils who either benefit or suffer from them, as the true state of the case may be.

We were led, after inspecting Tables LIII and LIV, to attempt to complete the story and discover where the remaining pupils following full-time education are to be found. It may be asked why we took the year 1921, seeing that education statistics are available for later dates. The answer is that it is only for the year 1921 that we know the total number of full-time pupils, and it is therefore only for 1921 that we can obtain by inference the number of pupils in institutions not covered by the official statistics. The official figures available for later dates suggest that the position has not substantially changed since 1921. In 1921, out of the whole population between 14 and 17 years of age, 19 per cent.

were pursuing their education whole time, and another 3 per cent. were following part-time courses.¹ Thus for more than three out of every four of these young people systematic education ceases early.

Further inspection of Tables LIII and LIV brings out the great disparity in numbers between those attending elementary schools and those attending secondary schools. It arises because education ceases altogether for the greater part of the population when it ceases to be compulsory—that is after the age of 14. The rising black tide in the diagram on p. 120 is proof of this, if proof is needed. The distribution of numbers in Table LIII indicates that the majority of children who are promoted to secondary schools from elementary schools move there some time before they reach the age of 14. This is due to the fact that the maximum age limit for those competing for scholarships and free places is usually 12.⁷ The number of those who pass to secondary schools is small, and the accommodation in secondary schools is limited. About 8,700 children, for instance, were said to have been excluded from grant-earning secondary schools at the beginning of the school year 1919–20 simply for want of accommodation, and the position has not greatly changed since.⁸ In consequence, as we read in another Government Report, the free places have in fact become scholarships contrary to the original intention. 'The political idea behind the free place regulations was that state-supported schools must be accessible and not be "class" institutions . . . it was emphasised that they (i.e. the free places) must not be regarded as scholarships awarded for exceptional merit, but that they should be open to any Public Elementary School child who reached the ordinary standard of entry.' The same Report goes on to say that the anticipation that the free-place holders would be indifferent material and would leave school early has not been realized. 'The contrary has proved to be the case. It is the common experience both that they stay longer at school than other pupils and that they form a large proportion

of the abler pupils, with the result that in the higher forms they tend to predominate.'⁹

We are now reaching a point in our analysis where we can take up the question of the extent of the equalization of opportunity. The rich can buy what education they please for their children, and they commonly send them to expensive preparatory schools, public schools, and the ancient universities. Whether such an education is a good education in the truest meaning of the term is beside the point. Such an education carries prestige and facilitates the entry into many lucrative lines of work. The children of the rich thus not only inherit their parents' wealth but are also placed in positions where they can earn relatively big incomes. The system is such that it is not difficult for the rich to maintain themselves generation after generation in comparative comfort.

What of that other portion of the population who pass through elementary schools? * They will lack the prestige attaching to the training just described, and, so far as it has a commercial value, they will be at a disadvantage. But, putting this aside, let us consider what chance there is for an elementary school pupil to continue full-time education and so to get the training qualifying him or her for entry into the better paid occupations. What, in fact, do we know about the educational ladder?

Let us take all those who left public elementary schools, at all ages, during the three years 1922-5. Their total number was 2,060,000. What became of them? The great majority, 1,543,000 (75 per cent.), left on or after becoming totally exempt from school attendance.

* What proportion of the population, it is sometimes asked, obtain their primary education in elementary schools? This question may be understood in several different ways. The information most usually required, when the question is put, is given by stating that in the year 1924-5, 93 per cent. of the estimated population between the ages of 6 and 10 were on the registers of public elementary schools.¹⁰ This does not imply that the remaining 7 per cent. were being educated in preparatory schools. This 7 per cent. consists of (1) children who would be in elementary schools but for physical or mental disability, (2) children in preparatory and other schools, (3) children who would be in preparatory and other schools but for disabilities, (4) children being educated at home. The proportion which these four classes respectively form of the 7 per cent. is unknown.

None of these children are known to have gone to any other institution to follow a full-time course. 264,000 (13 per cent.) died, emigrated, or left for other unclassified and unknown reasons. Only 253,000 (12.3 per cent.) were definitely stated to have left in order to attend secondary schools, junior technical schools, or full-time instruction in other than public elementary schools.¹¹ It is interesting to note that this last percentage was precisely the same in each of the three years concerned. It is likely that a proportion of the 264,000 may not have left school altogether; they may, for instance, have moved into other elementary schools. It is unlikely, however, that they moved into grant-aided secondary schools, because they could then hardly have escaped inclusion in the last class. It would appear to follow that 80 to 85 per cent. of elementary school pupils do not obtain, and are, moreover, unable to obtain, whole-time education after the age of 14. Of the twelve among every 100 elementary school children who are definitely known to pass on to secondary and other schools, some are directly assisted from public funds to continue their education, while others are paid for by their parents. Can we discover what proportion of those who pass on are assisted? We can first ask how many places in secondary schools are free, and the answer is that about one-third are free.¹² The great majority (1,129 out of 1,280 in 1924-5) of grant-earning secondary schools are required to offer 25 per cent. of free places.¹³ Many provide more, with the result that one place in three is free on the average for the country. But we must not be misled into deducing that one ex-elementary school pupil in every three who pass on is assisted. This does not follow, because all secondary school pupils have not come from elementary schools. In 1924-5 only 70 per cent. of secondary school pupils had come from elementary schools. Between 1921 and 1924 the proportion remained steady at 68 per cent.¹⁴ We may say that roughly two-thirds of all places in grant-aided secondary schools are filled by ex-elementary

school pupils, and that one-third of all the places are free. It follows that half the children who pass from elementary schools to grant-aided secondary schools go to occupy free places. Further, if only 12 per cent. of all who leave elementary schools continue their education in other schools of any kind, it is unlikely that the percentage of all public elementary school pupils who pass on to secondary schools as free pupils is greater than six, and it may be appreciably less.

It must not be supposed, however, that the free-place system represents the whole provision made with the object of equalizing educational opportunities. Some of those exempt from fees also receive maintenance allowances; in 1918-19 nearly 40 per cent. of the free placers in grant-aided secondary schools in England were assisted to the average extent of £8 19s. per head per annum.¹⁵ Far more important than these maintenance grants is the fact that the fees paid by secondary school pupils do not cover the costs. The balance is made up from taxes and rates. If we take not merely secondary school education but all forms of higher education, we find that in 1924-5 the fees amounted to less than 17 per cent. of the total required to cover all expenditure.¹⁶ It follows that of the 12 or so in every 100 elementary school pupils who pass on to secondary and other schools, it is not the six free-placers alone who are assisted. The six fee-payers are also materially assisted.

It thus appears that we assist something like 12 out of every 100 elementary school pupils to a greater or less extent to take a step higher up the educational ladder. It was suggested in evidence before the Departmental Committee on Scholarships and Free Places that three out of every four children in elementary schools would profit from continued education, and this estimate was accepted as a convenient working hypothesis. Mr. Kenneth Lindsay, in his stimulating study of the scholarship system in different localities, finds that where a thorough canvass has been made, as at Bradford, at least

50 per cent. are described as capable of profiting.¹⁷ Even if we take the lower of these two estimates it is obvious that we have advanced but a very short way towards providing opportunities for continued education for all elementary school children who can profit by them.

Let us now consider the next step in the educational ladder. How many children educated in grant-earning secondary schools find their way to a university? Figures for the three years 1921-4 show that of 201,649 pupils leaving such schools in England over 14 years of age during the period, 8,867 (5,231 boys and 3,636 girls) went to a university. These figures are said to be in all probability an underestimate by about 10 per cent., as they do not include those intending teachers and other pupils who only proceed to a university after an interval.¹⁸ Adding in this 10 per cent. we get 9,754 in place of 8,867, and it therefore follows that 4.8 per cent. of the total of those over 14 years of age leaving grant-earning secondary schools in England during these years found their way to a university. In a recent Report of the Board of Education it is stated that 15 years ago the common assumption that a secondary school provided an avenue to the university, at any rate for able pupils, was not generally warranted, but now it may fairly be said that there are very few schools which do not send, at any rate, an occasional pupil to the university. In 1923-4 the pupils proceeding to London and the English provincial universities from schools provided by local education authorities formed actually a majority over other, including the leading endowed, schools, although in number they represented only 49.4 per cent. of the total number of schools on the grant list in England and Wales.¹⁹

We are further told that ex-public elementary school pupils formed 62 per cent. of all who went from grant-aided secondary schools to a university.¹⁸ On the basis of these figures we may put the number of ex-elementary school children in England who enter a university from

grant-earning secondary schools in the course of a year at one-third of 6,048 (which is 62 per cent. of 9,754), 2,016, or roughly 2,000. What chance, therefore, is there for an elementary school pupil to reach a university? The total number over 14 years of age who left elementary schools in England and Wales for all reasons during the two years 1922-3 and 1924-5 was 1,043,309, or an average of 521,654 per annum.¹¹ This last figure must be reduced by about 8 per cent., making 480,000, since we want the number relating to England alone.²⁰ On the basis of these figures, 4·2 per 1,000 ex-elementary school pupils reach a university. But, a few such pupils reach universities by avenues other than the grant-aided secondary schools. We conclude, therefore, that something between four and five in 1,000 ex-elementary school children in England reach a university.

The position in regard to universities is therefore not unlike that in regard to secondary schools. The percentage of university students coming from public elementary schools and grant-aided secondary schools is high, though the percentage of all students in public elementary and grant-aided secondary schools who pass on to universities is small. We may go on and ask the same question regarding those who pass to universities that we asked regarding those who passed to secondary schools. How far are they assisted? The information available does not enable us to say directly how many ex-public elementary school pupils are assisted during their university careers. We have some information, though not of a very complete kind, regarding assistance to university students in general. Two hundred State scholarships are offered for competition during the year. The scholarships are tenable for three years, and the average grants received for fees and maintenance averaged £94 in 1925.²¹ In 1923-4 local authorities assisted 1,200 entrants to universities to the extent of about £67,000. Further, in 1924-5 1,196 entrants were admitted as degree students under the training of teachers schemes, and were aided by the Board of Education, and some by

local authorities also.¹⁹ If these figures may be taken as typical, it appears that some 2,600 students get financial help in one form or another to reach the university. This is a substantial proportion of the total number who pass on from grant-earning secondary schools, which we found to be about 3,250 per annum during the years 1921-4. It is true that some in the above number who have been assisted out of public funds may not have been educated at a grant-earning secondary school. On the other hand, there are some to be added who have been at these schools and who have won open scholarships at the older universities.

The conclusion to be drawn from this discussion is evident enough. The educational ladder is an ideal rather than a fact. The position is difficult to grasp because of the diversity and complexity of the system. This may be advantageous so far as the scholars are concerned since it may imply flexibility rather than rigidity. However, this may be, it is full of perplexities for the statistician, who is tempted to long for a simpler scheme the working of which might more easily allow of a summary.

Apart from the system of full-time education already described, leading up to the university as the final goal of endeavour, there are numerous facilities for part-time and continued education both for adolescents and adults. Some of this work, as for instance that done by the National Adult School Union, the Co-operative Movement, the National Federation of Women's Institutes (a rural organization with some 150,000 members, started only in 1917), and the Y.M.C.A., receives little or no support from public funds. It is not easy, therefore, to get figures to indicate its extent, but it should not be passed over as unimportant. A great part of the education which falls under this head, however, is publicly assisted and directed by local education authorities. It is not possible to draw a strict line between schools which offer full-time and schools which offer part-time instruction, because there are many which provide both.

A more satisfactory division can be made between the education which normally ends either at 14 in the elementary school or somewhat later in a secondary school, and the education which then starts in schools or institutions of a rather different type. Table LV gives the number of students who attended technical and continuation courses during the school years ending on or before 31st July, 1924. The great majority of the students are fully occupied in the day and go to these classes voluntarily in the evening. The juniors attend for a variety of reasons, some of them rather vague; the older students are more definite in purpose: normally they want vocational instruction. 'Most of them', we are told, 'want to become better equipped, perhaps not so much for the precise work in which they are occupied as for some superior work to which they have a more or less definite prospect of advancement. But it would be as erroneous to suppose that all these students have solely the motive of a personal advantage, to be reaped at some more or less remote date, as to believe that they are moved solely by a zeal for learning.' An interesting point in the table is that whereas females form about two in five of the total under 21 years of age, over that age they actually exceed the number of males.

TABLE LV²²
England and Wales, 1923-4.
Technical and Continued Education.

<i>Nature of School or Course.</i>	<i>Males (00s)</i>		<i>Females (00s)</i>	
	<i>Under 21.</i>	<i>21 and over</i>	<i>Under 21.</i>	<i>21 and over.</i>
Day Continuation Schools	121	—	114	—
Junior Technical Schools	102	—	18	—
Day Technical Classes	39	24	43	16
Evening Schools and Classes	2,644	903	1,754	1,068
Technical Institution Courses and Courses of Advanced Instruction in Arts	28	9	3	1
Junior Departments of Art Schools	10	—	5	—
Art Schools	171	62	130	116
Schools for Nautical Training	15	—	—	—
Total	3,130	998	2,067	1,201

We have still to consider what may be more properly termed Adult Education, including University Extension Courses and Tutorial Classes conducted under the control or part control of universities and university colleges, and One-Year and Terminal Courses controlled for the most part by the Workers' Educational Association. The Tutorial Classes are of particular interest: they are perhaps the most intensive part-time courses of a general as distinct from a vocational nature, for they last not less than three years and occupy at least two hours a week for twenty-four weeks in the year.²³ The demand for them has been stimulated by the Workers' Educational Association, which was founded in 1903, and those who enrol as students are mostly adult work-people. The nature of their everyday work may be judged from Table LVI. The total number of three-year classes in 1924-5 was 412, and the number of students was 8,808, the number of men being not quite double the number of women.²⁴

TABLE LVI²⁵

Occupational Distribution of Original Students attending Three-Year Classes beginning in the School Year, 1922-3.

Men				Women	
Occupation.	Per cent.	Occupation.	Per cent.	Occupation	Per cent.
Metal Workers	18.5	Teaching	6.5	Teaching	37
Clerks and Draughtsmen, Typists	15.5	Wood and Furniture	3.9	Clerk and Typists	11
Miners and Quarrymen	9.5	Professional Occupations (excluding Clerks)	3.4	Public Administration	7
Public Administration	9.0	Textiles	2.2	Makers of Textile Goods	5
Commercial, Finance, and Insurance	8.0	Other Occupations	16.8	Other Occupations	15
Transport and Communication	6.7			Not Gainfully Occupied	25
		All	100.0	All	100

Table LVII shows the number of adult education classes held in 1924-5 and the subjects studied in each.

TABLE LVII.²⁶

*Adult Education ; England and Wales, 1924-5.
Number of Classes and Subjects of Study.*

<i>Type of Course</i>	<i>Number of Classes</i>	<i>Subjects of Study.</i>	<i>Number of Classes</i>
Three-Year Tutorial	443	Economics (including Industrial History and Geography)	332
Advanced Tutorial	11	History	112
University Extension	56	Sociology	111
Preparatory	75	Literature and Language	249
One-Year	189	Aesthetics (Music, Art, Drama)	101
Terminal	262	Philosophy	99
		Natural Science	27
		Other Subjects	5
Total	1,036	Total	1,036

It is obvious that it is difficult to define education. The most common difficulty is that of distinguishing between something that is sufficiently serious and definite to merit the description of education and something that is not. A less obvious difficulty is that of distinguishing between unbiased and biased education. The former alone deserves to be called education. The latter seeks to teach certain conclusions and does not limit itself to stimulating the student to think and inviting him to form his own conclusions. It is a form of instruction favoured by certain political organizations, and, since their teaching arouses fierce resentment, their critics at least would be readily persuaded that these institutions are not educational institutions in the true sense. But it might be difficult to convince many good people that theological colleges are equally unfitted to be classed as educational institutions in the true or, if it is preferred, in the narrow sense. To the extent that they teach a sectarian point of view they are necessarily biased, and they should therefore be classed with the Plebs League, however much it might surprise their supporters to find themselves in such company. It is for that reason that we have in this chapter excluded them from a survey of the educational system of the country.

XII

ENTRANCE INTO OCCUPATIONS

ALL boys and many girls on leaving school look for a job. Owing to the fact that there is no system of compulsory part-time education the transition from school to wage-earning is usually abrupt. Those who continue their education part time do so at their own wish, or at least without legal compulsion. This sudden change occurring at an early age involves the thrusting-out of these young people into the world and raises problems of the greatest magnitude. It is not, however, with the problems but with the facts that we are here concerned. Let us inquire how many seek employment for the first time every year, what different forms of employment are open to them, and how many these different forms of occupation absorb. The inquiry may be limited to those technically known as 'juveniles', that is, to those between 14 and 18 years of age. It is not possible to make generalizations concerning the small number of older persons who seek to enter the skilled professions.

In 1924-5 278,313 boys and 272,128 girls, a total of 550,441, left public elementary schools in England and Wales at 14 years of age or over. Apart from those girls taking up domestic duties at home, the number of whom though unknown is evidently considerable, most of these young people sought to enter trade or industry. In addition, there were some 75,000 leavers from secondary schools under 18 years of age, and between 6,000 and 7,000 leavers from junior technical schools, junior commercial schools, junior art schools, and junior trade schools. A considerable proportion of these boys and girls may also be expected to enter industrial employment, though no precise statistics are

available. 'Any total figure is necessarily a very rough estimate, but it seems probable that something like 600,000 juveniles leave the various types of school annually with the object of entering some kind of employment other than occupation at home.'¹

What does industry offer to these young people? What different forms of occupation are open to them? Occupations may be grouped under six heads. (1) Occupations in which juveniles are mainly or only employed and in which the chances of retaining employment until or after the age of 18 are remote: van and messenger boys have for instance little chance of retaining employment after 18. (2) Occupations in which a few juveniles are retained: boiler scalers and rivet lads fall within this class. (3) Occupations in which there is a reasonable chance of retention but little chance of promotion, such as in the textile industries. (4) Occupations with a reasonable chance of retention and good chances of promotion, such as in engineering, ship-building, and printing. (5) Casual or seasonal occupations such as dock labour and fruit-picking. (6) Occupations, such as in the heavy industries and in transport, where few juveniles are employed.²

Many young persons are thus faced with the necessity of changing their occupations about the age of 18. Frequently they have not merely to change their occupation for another in the same industry, but to find a new occupation in a different industry. This is so because the proportion of juvenile to adult labour varies from industry to industry. There are industries such as the railways where few juveniles are employed. Most of those who enter these industries must continue their industrial careers elsewhere. There are again industries, such as confectionery manufacture, in which many juveniles are employed but only a few can be retained. These difficulties are inherent in the very nature of these industries and can only be surmounted by a well-planned organization. 'Blind alley' occupations cannot be altogether dispensed with, though the

hardships now involved might be considerably reduced. Casual occupations, however, are not inevitable and might be brought to an end.

Those who enter occupations of the fourth class frequently receive some form of industrial training. A distinction may be drawn between apprenticeship and learnership. Apprenticeship implies a contractual relationship between an employer and a worker, the employer undertaking to train the worker and the worker undertaking to serve the employer on stated terms for an agreed number of years. The contract may or may not take the form of a written agreement, and if it does the agreement may or may not be an indenture. Learnership is another form of relationship between employer and worker. The worker is engaged for a recognized period of training and is provided with instruction or with definite facilities for learning a branch of the industry.³ It should not be thought that an apprentice is guaranteed a job when he comes out of his time, or even that he is guaranteed against unemployment during his time. It is not uncommon for indentures to contain a clause enabling the employer to 'stand off' the apprentice without pay if there is no work for him.⁴

The choice of an occupation thus presents many problems to these 600,000 young persons who come forward from school every year. An elaborate system whereby information and advice may be made available seems to be called for. A beginning has been made with the building-up of such a system, though it is still in the early stages. In every district there is either a Juvenile Department of the Labour Exchange or a Juvenile Employment Bureau. The former are administered by the Ministry of Labour and the latter by the local education authorities. Local education authorities have the option to undertake the work if they wish, and in 1925, out of 318 local education authorities, 137 had approved schemes in operation.⁵ Juveniles seeking employment may register their names at these

exchanges and bureaux if they so wish. There is an extra incentive for juveniles between the ages of 16 and 18 to register, because unless they do so they are not eligible for unemployment benefit. During 1925 126,521 vacancies for boys and 110,286 vacancies for girls, and during 1926 114,872 for boys and 105,353 for girls, were filled through the exchanges and bureaux. During 1925 there were on the average 63,000 boys and girls on the register.⁶ Since during 1925 places were found for some 237,000 juveniles, whereas during the middle of the year there were 60,000 on the register, it follows that those on the register must resemble a stream rather than a reservoir. They flow in from schools and jobs they have left.

How do matters work out? It is estimated that skilled industries find places for a total of about 300,000 lads in Great Britain who are passing through, or who are supposed to be passing through, a more or less systematic course of industrial training in the shape of apprenticeship or learnership. Since the most usual duration of training is five years, it would appear that when allowance is made for wastage, skilled industries can absorb about 80,000 boys a year. In other words, since about 320,000 boys leave elementary schools in Great Britain annually, roughly one-quarter of the boys seeking jobs can hope to obtain some form of training which will render them more or less skilled.⁷ It is probable that the intake of apprentices and learners is at present below normal. Owing to the industrial depression employers tend to engage skilled men who are out of work rather than to take on apprentices, and parents seek to place their boys in gainful employment at the earliest possible age. The figures in this paragraph are the estimates adopted by the Royal Commission on Trade and Industry. It may be noticed that the estimates, if correct, indicate a very large amount of wastage. 80,000 boys enter annually into skilled industries, and of them 60,000 only complete the training. One in four drops out. This wastage takes place through

death and migration into other industries. The latter must be the most important cause of wastage if it is of these dimensions. We may perhaps see some corroboration of this extensive migration in the figures quoted in the preceding paragraph, which suggest that the exchanges and bureaux have to deal with a large stream of applicants desiring work, many of whom have left jobs.

These occupations where some form of training is given are not all open for boys at the same age. Learners usually enter at 14 except in heavy industries, such as iron, steel, and chemicals, where they enter at 16. It is probable that not less than half the apprentices enter at or above the age of 15, and that a third enter at or above the age of 16. Therefore, many boys who get jobs where training is given must either take a 'blind alley' or some other job for a year or so after leaving an elementary school, or continue full-time education at a secondary or junior technical school.⁷

Further light is thrown upon the situation by an inquiry into the personal circumstances and industrial history of 3,331 boys and 2,701 girls registered for employment at employment exchanges and employment bureaux in June and July 1925. These boys and girls formed 10 per cent. of all those registered for employment at this date. They are not representative of all juveniles, because they are a random sample of unemployed juveniles only. While not all unemployed juveniles between 16 and 18 register, and only a proportion of those between 14 and 16, there are nevertheless reasons for thinking that the figures represent fairly all unemployed juveniles.⁸

Among other particulars, details were obtained regarding the first situation found by these boys and girls. Rather more than half of those who had had any employment obtained situations within a month of leaving school. When we remember how much unemployment existed in 1925, this is a surprising result of the investigation, especially in view of the fact that in many of

the cases, particularly among the girls, employment was probably not sought immediately after leaving school. Nearly 60 per cent. of the situations were obtained unaided, a quarter were obtained through relatives or friends, and 12.4 per cent. through exchanges or bureaux.⁹ The small number of first situations obtained in the latter manner does not indicate that the services rendered by these institutions to their clients, namely boys and girls from 14 to 18, are negligible. Boys and girls who obtain a situation before the age of 16 are under no compulsion to register. Their use of the exchanges and bureaux is entirely voluntary. Furthermore, so far as these figures go, it might well be that placings through exchanges or bureaux are more effective than through the unguided efforts of those who find places for themselves. If, to take an extreme case, placings through these institutions were so effective that no boy or girl so placed ever lost his or her job, no single unemployed juvenile would be found whose first situation was obtained in this manner. On the other hand, if a high percentage of unemployed juveniles were found to owe their first situations to exchanges and bureaux, it might be evidence that unsuitable and unsatisfactory placings were frequently made through them. We do not possess enough evidence to show how we should interpret this figure. Enough has been said to indicate that the interpretation actually given in certain quarters—namely, that these institutions are of no great value to juveniles—may very well be quite erroneous.

When first situations are classified we find that, of the well-defined industries, those showing the highest intake of boys were Engineering 8.3 per cent, Colliery Workers 8 per cent, Ship-building 6 per cent., Textiles 5.2 per cent., and Clerical 5.1 per cent.; and of girls, Domestic Service 20.2 per cent., Textiles 12.5 per cent., Dress 12.1 per cent., and Clerical 7.3 per cent. If we group together all those occupations such as shop boys, errand boys, warehouse boys, hawkers, packers, and milk

delivery boys, which cover most of the occupations without prospects, we find that 44.4 per cent. of the boys entered such occupations. A similar calculation in the case of girls works out at 16.4 per cent., or at 27.4 per cent. if shop girls are included. Another classification shows that 16.9 per cent. of the first situations obtained by boys and 12.6 per cent. of those obtained by girls were casual or seasonal in character.¹⁰

An attempt was also made as the result of this investigation to discover what proportion of the first situations offered prospects of training. It was found that 5.9 per cent. of the boys and 3.7 per cent. of the girls were apprenticed in their first situations, that 23.8 per cent. of the boys and 28.6 per cent. of the girls were receiving some form of training, and that the remainder, 70.3 per cent. in the case of boys and 67.7 per cent. in the case of girls, were neither apprenticed nor trained. This result is not out of accord with the calculations given on a previous page, to the effect that about a quarter of the boys entering industry receive, or are supposed to receive, some form of training. The small number of those apprenticed is notable. It has to be remembered that in many occupations apprentices are not taken until they are a year or more above school-leaving age, and that therefore the proportion of apprentices among those obtaining first situations is not as high as among all juveniles in any occupation. In fact, among all the boys interviewed for the purposes of the inquiry who had been employed, 11.1 per cent. had been apprenticed.¹⁰

The results of this investigation may be compared with those of another inquiry, which took the form of analysing the first situations obtained by 1,000 boys and 1,000 girls leaving 18 representative elementary schools in a London borough between 1919 and 1922.¹¹ This inquiry differs from that referred to above in that the inquiry was not limited to the unemployed. Further, those few boys or girls who at 14 pass on from an

that roughly a third of the boys and of the girls enter skilled (not clerical) occupations, and thus in general the results are concordant with those derived from other lines of inquiry. An inspection of the detailed list of occupations for boys which are included under the group of semi-skilled makes it apparent that systematic training can seldom be given in these occupations. A similar inspection of those included in the skilled group makes it doubtful if systematic training is always given even there. Again, the miscellaneous semi-skilled occupations include office boys and packers. Thus it appears that the standards of what constitute skilled and semi-skilled work are not set unduly high in this investigation. It may well be that, in consequence, the proportion of what are often regarded as unskilled occupations is somewhat underestimated.

Choice of employment is limited by educational acquirements, and educational opportunities are limited by the financial position of the parents, except in so far as the educational ladder provides a way out. Most children, therefore, receive an education which enables them to enter the same grade of occupation as their parents. This being so, it would be anticipated that children would tend to enter not merely the same grade of occupation, but the very same occupation as their parents. Two classes of factors work towards this result. In the first place the localization of industries and the immobility of labour imply that in many areas one kind of occupation exceeds any other kind of occupation in the number of openings it offers. Thus, in mining or textile districts most parents will be mining or textile workers, and most openings for young people will necessarily be of the same nature. Apart from factors of this nature, there are others which tend to the same result. Thus parents are more likely to know of openings in their own rather than in any other occupation.

It would therefore be anticipated that children would be found to enter the father's trade rather than any other trade. This expectation is borne out by the results

of an inquiry made by Messrs. Chapman and Abbott among scholars in evening schools in Lancashire.¹² The investigation covered 2,415 scholars most of whom were between the ages of seventeen and twenty. The pull of the father's trade was found to be strongly marked. Thus, of the sons of textile workers 62 per cent. entered the textile industry ; the next occupation in order of importance was clerical work, which took 10 per cent. of the sons of these textile workers. 49 per cent. of the sons of clerical workers were themselves clerical workers ; the next occupation in order of importance in this case was textile work, which took 17.5 per cent. On the basis of certain assumptions, which could be partially verified, these authors concluded that ' the relative pull of the father's trade on his children, in comparison with the pull of any other given trade of about the same grade, would tend to be roughly as 3 to 1 ', if all the trades were of equal magnitude and growing at the same rate.

Another small investigation by Messrs. Ashby and Morgan Jones into the social origin of farmers in Wales also bears upon the same question.¹³ Records of the antecedents of 834 occupiers of farms were obtained, believed to be fairly representative of the country as a whole excluding the counties of Flint and Merioneth. As judged by this sample, 75 per cent. of existing farmers were descended from farmers ; 11 per cent. were the sons of farm workers ; 5½ per cent. were the sons of artisans ; 7½ per cent. were sons of other manual workers ; and 1 per cent. were sons of persons engaged in other occupations. The surprising result here is that so large a proportion of the incomers were descended from the non-agricultural working class.

Looking at social structure from the point of view of this chapter there are two possible extremes. On the one hand a caste system is possible. Under such a régime the ' untouchables ' at one end of the scale perform the menial services, and to the sons of the ' untouchables ' no other career is open. At the other end, privileges are confined to a favoured group and their descendants.

Various societies have from time to time been organized on lines corresponding more or less closely to this state of things. On the other hand, it is possible to imagine a society which is no respecter of persons, where the members somehow get into just those occupations for which they are best suited no matter what the standing of parents may be. Such a state of society has in many countries at many times been envisaged as an ideal to be striven for, but nowhere, as yet, has it been substantially realized.

The situation in this country is somewhere between these two extremes. It is not possible to say to which extreme it most nearly approximates. There is an almost complete lack of statistical information regarding rise and fall in the social scale. Some evidence exists tending to show that at least in certain industries there is more movement from class to class than is generally realized. Messrs. Chapman and Marquis investigated the extent of the recruitment of the employing classes from the ranks of operatives and clerks in the cotton industry.¹¹ Letters were addressed to about 250 employers, mill managers, and directors, of whom over 70 per cent. replied. Of those replying nearly 80 per cent. were 'first generation employers'; they had, that is to say, risen from the ranks of wage-earners. The authors supplemented this information by personal investigation, and, while allowing for the possibility of some error in the actual figures, their broad conclusion is emphatic. 'Universally we found', they say, 'abundant indication, if not rigid proof, that there exists a free channel of no insignificant dimensions through which the directing classes are continually being recruited from the wage-earning classes. Competition undoubtedly exists to an appreciable extent between what have sometimes been regarded as "non-competing" groups.' This conclusion may seem at first sight to conflict with the reference to the textile industry on a previous page, where it was said that the chance of promotion was small. But the conflict is apparent and not real. Just as ex-elementary

school pupils form a large proportion of all who reach the university, but only a tiny fraction of all who began their education in elementary schools, so here ex-wage-earners form a large proportion of those who reach the ranks of employers, but only a tiny fraction of all who began work as wage-earners.

Freedom of movement, however, is one thing and the getting of the right people into the right place quite another. It is sometimes rashly assumed, especially by the successful, that victorious upward progress is evidence not merely of the fact that some at least have it in them to make their way, but also that those who gain positions of power and responsibility are fitted for them. In addition to the possibility of upward movement there is required a just appreciation of social values in the community which will restrict promotion to those who deserve it.

XIII

STATE PROVISION AGAINST MISFORTUNE

THE discussion in the last chapter has brought us back to where we were in an earlier chapter. In Chapter IV we analysed the population by industry, and in the last chapter we discussed how young people get into industry. But it is clear that we have not yet reached our goal. We have now to ask how workers in industry fare. This line of inquiry might lead us to discuss the whole subject of industrial relations. We set out, however, to concentrate our attention upon the social rather than the industrial structure of this country, and, in consequence, many topics which fall under the heading of industrial relations are outside our scope. Workers are menaced by ill-health and unemployment, and are faced by old age. What provision, we may ask, is made against these dangers?

It is well known that on the one hand State or communal schemes exist, and that on the other hand voluntary provision is made on a large scale in many ways. The extent of the latter is not widely known and some reference to it is in any case desirable. The State schemes are for the most part very familiar. Millions come under them, and the rates of contribution and of benefit do not require mention here. We might, in fact, dismiss them with a mere reference and pass on to voluntary schemes, were it not that an important aspect of the State schemes is not so familiar and deserves some discussion. We have dealt with the national income and its distribution. The distribution described, however, takes no account of taxation, and, to the extent to which these State schemes tax those who do not benefit under them and use the money to benefit others who contribute less than they receive, there is transfer from rich to poor. We may therefore briefly ment on the State schemes in this

chapter, laying stress upon certain aspects which are not generally familiar and upon others which are relevant to the discussion of the transfer from rich to poor which will follow in the next chapter.

State schemes which have as their object the prevention and cure of ill-health are not confined to workers, whether juvenile or adult. Public concern, in fact, begins with the babe unborn. Various services are classed together under the head of Maternity and Child Welfare, and among them may be mentioned the provision of the services of midwives, health visitors, and nurses; of welfare centres, day nurseries, and maternity and convalescent homes. Milk and food for infants is provided, sometimes free or below cost price. The total expenditure from public funds upon these services in Great Britain in 1925 exceeded £1½ millions.¹

These services are provided for the benefit of mothers and infants. For children between the ages of two and five the State shows at present little concern. As we shall notice later, there is another curious gap in this network of services. Young people between the ages of fourteen and sixteen are also relatively neglected. At the age of five, when children enter the elementary school, the medical staff of the local education authority descends upon them and subjects them to a medical inspection. This examination is twice repeated during their stay in the elementary school, between the ages of 8 and 9 and again between the ages of 12 and 13.² The duty of examining elementary school children was first imposed upon local authorities. They are now also obliged to inspect pupils in certain secondary schools under Section 80 of the Education Act, 1921. This section further gives authorities the power to make provision for the medical treatment of such pupils.³

If special as well as routine inspections are counted, some 2½ million children, or nearly half the average attendance at these schools, come before the doctors in the course of a single year.² What, it may be asked, is the result of all this? A quotation from the medical

report for 1924 is illuminating. It is stated that when doctors first began to visit the London schools in 1902, 'the conditions found were indescribable. In many schools scarcely a girl was free from infestation and vermin could be seen dropping from the heads of the older girls as they stooped over their lessons.' By 1913 67 per cent, and by 1924 82½ per cent., of the older girls were free from verminous heads.¹ Great as has been the improvement in respect of cleanliness, the results of inspection show that the percentage of children examined who are found to require some form of treatment is large and shows little sign of diminishing. Out of nearly 1½ million children inspected in 1924 in elementary schools other than in London, 20 per cent. were found to require some form of medical treatment, while in London the corresponding figure was 17 per cent.² 269 out of the 317 local education authorities also made provision for dental treatment, and, out of the 1¼ million children examined, 67 per cent. were found to require treatment.³ The total cost of the medical service in public elementary schools amounted in 1923-4 to about £1¼ millions, but this figure, large as it is, may be regarded as a comparatively small premium for health insurance: it represents only about £2 4s. out of every £100 spent on public elementary education.⁷

These State schemes for the medical inspection of children are free, but the rule is that all children requiring treatment shall in the first instance be referred to a private practitioner.² The community does not yet undertake to feed all school children free of cost. Children of necessitous parents can, however, be given free meals, and in 1923-4 103,000 children were given 11 million meals.⁸ The children who are fed are selected because, in the first place, they are observed to be undernourished and thus unable fully to profit from attendance at school, and because, in the second place, the parents are found on inquiry to be in very poor circumstances. It seems to be the opinion of those most closely in touch with the parents and children who benefit, that this

service is regarded as akin to Poor Law relief. If this is so, the attitude is justified because, although the feeding of school children has no official connexion with the Poor Law, it is a form of relief indistinguishable in principle from Poor Law relief. As such it stands apart from the State schemes mentioned in this chapter and is introduced only to complete the tale of State-provided benefits that school children may receive.

After this brief reference to the communal provisions against the ill-health of those under fourteen, let us now ask what schemes are in operation to safeguard those who enter industry. As observed above, young people who enter industry between fourteen and sixteen are somewhat neglected. The great schemes which aim at protection against ill-health and unemployment do not include those under sixteen. All those, however, subject to certain exceptions, between the ages of 16 and 70 who are employed in a contract of service in manual labour, or in non-manual employment at a rate of remuneration not exceeding £250 a year, are required to be insured under a scheme which provides benefits in the case of ill-health, orphanhood, widowhood, and old age.⁹ The benefit in the case of old age begins to operate on January 2nd, 1928, and will be receivable by those between the ages of 65 and 70. The remaining benefits are receivable now.¹⁰

That part of the scheme which provides benefits in the case of widowhood and orphanhood and pensions for those between 65 and 70 has only recently been grafted upon the National Health Insurance scheme, which came into existence in 1911. It is, therefore, with regard to the results of the latter only that we have any statistical information. The total number insured under the scheme in the present United Kingdom exceeds 15 millions, in the proportion of about two men to one woman.¹¹ The total income from contributions of employers and employed in Great Britain amounted in 1924 to £27,377,000; about £5,000,000 was derived from interest on accumulated funds and £7,045,000 was

contributed by the Exchequer inclusive of the central Government departments. Apart from the cost of the central departments the State, in fact, contributes two-ninths, or in the case of a woman one-quarter, of benefits and administration costs. The expenditure on benefits was £26,118,000 and the cost of their administration £3,804,000, leaving a substantial balance.¹² The huge accumulated fund is regarded as belonging to the contributors as a whole, who have secured a more certain title to it than have the contributors to such a fund as the Road Fund.

The working of the scheme has resulted in the collection of a vast amount of statistical data which are for the most part of medical interest. Incidentally it enables us to form some idea of the amount of working time lost through ill-health. To this matter we shall refer later, when we are in a position to compare the amount of time lost through ill-health with that lost through unemployment and strikes. We shall also examine how far this scheme, together with others to be considered in this chapter, bring about a transfer of wealth from rich to poor. Here we may content ourselves with noticing that those who signed the Majority Report of the Royal Commission on National Health Insurance (1926) came to the conclusion that the scheme had fully justified itself, and 'has now become a permanent feature of the social system of the country'. In this opinion the four signatories of the Minority Report in general concurred.¹³

Alongside the State provision against ill-health stands the Unemployment Insurance scheme. All employed persons come under the scheme except (1) non-manual workers earning over £250 a year ; (2) juveniles under 16 ; (3) outworkers, persons employed in agriculture, and domestic service ; (4) employers of railway companies, local authorities, and others having approved schemes of their own. The total number of persons insured against unemployment in Great Britain and Northern Ireland in July 1926 was just over 12 millions.¹⁴ As in the case of National Health Insurance the contribu-

tions and benefits need no mention here. One aspect of the scheme is, however, so often misunderstood, partly because the conditions have been frequently changed, that the present position (July 1927) may be set out. An insured person is entitled to one week's 'standard' benefit for every six contributions paid, subject to a maximum of 26 weeks' benefit in an individual benefit year. But, on exhaustion of contributions or maximum of 26 weeks, and subject to fulfilment of special conditions, the applicant may at the discretion of the Ministry of Labour receive 'extended' benefit for the remainder of the benefit year.¹⁵ If, indeed, the word 'dole' is applicable at all to this scheme, it is only with regard to extended benefit that it could possibly be justified.

The working of the scheme provides statistical information of great interest. We have already employed in Chapter IV data thus derived bearing upon changes in numbers in various industries. We may confine ourselves here to a reference to an inquiry, made by the Ministry of Labour in November 1924, into the personal circumstances and industrial history of nearly 11,000 claimants to unemployment benefit, a sample which might fairly be taken as representative of the whole body of claimants to benefit though not necessarily representative of all who are unemployed. The employment exchange officers who interviewed the 11,000 claimants were asked to place each person in one of four categories of employability (among others) defined as follows :

- A. Persons who, in normal times, would usually be in steady employment.
- B. Persons who, though not usually in steady employment would, in normal times, obtain a fair amount of employment.
- C. Persons who would not in normal times obtain a fair amount of employment, but who were not considered to be 'verging on the unemployable'.
- D. Persons who were considered to be 'verging on the unemployable'.

The officers placed 62.7 per cent. of all males interviewed in Class A and 86.1 per cent. in A or B ; they placed 77.2 per cent. of all females interviewed in Class A and 90.2 per cent. in A or B. Only 3.6 per cent. of the males were placed in Class D, and over two-thirds of these were 60 years of age or over. Only 1.4 per cent. of the females were placed in Class D, and nearly one-half of these were 60 years of age or over. Further, a large proportion of those in Class D were found to be suffering either from poor physique, poor health, or some manifest physical defect.¹⁶

If we had similar particulars for a sample of those in employment we could institute a comparison between the two groups. As things are, we can make no comparison between employed and unemployed. But an inspection of the findings, which, it must be recollected, refer not to the unemployed in general but only to those in receipt of benefit, seems to indicate that they cannot be markedly inferior in health and physique to the average of the employed. There seems to be no reason to suppose that the bulk of the unemployed are out of work because of any inferiority in endowment or equipment. They are presumably the victims of ill fortune. It may, however, be that the small number falling within Class D are out of work chiefly because of mental or physical defect. When we come in a later chapter to study such data as are available concerning the legal poor and criminals, we shall find reason to suspect that they are not on the average gifted with an endowment equal to that of the rest of the population.

It may be of interest to compare the time lost through sickness and unemployment. To these figures may be added others showing time lost through trade disputes. The amount of time lost through sickness does not show great variations from year to year, whereas the figures for unemployment and trade disputes exhibit variations so great that it would be necessary to give figures for a number of years to gauge properly their extent.

TABLE LIX.¹⁷

*Number of Weeks (millions) lost in Great Britain through
Sickness, Unemployment, and Trade Disputes.*

<i>Year.</i>	<i>Sickness.</i>	<i>Unemployment.</i>	<i>Trade Disputes</i>
1921 . . .	—	93	14 3
1922 . . .	22·3	81	3 3
1923 . . .	23 0	66	1 8
1924 . . .	26 0	58	1 4

These figures must be used with caution. The Sickness figures refer only to the insured population and do not include the first three days of illness. The figures are certainly well within the facts. The Unemployment figures were obtained by taking an average of the 'live registers' of the employment exchanges in Great Britain. The figures given considerably underestimate the total loss of time through unemployment, because they take no account of those who, not being insured against unemployment, have no valid claim to benefit or, having no valid claim, do not register at the exchanges. The figures given under Trade Disputes only represent the time lost at the works actually involved in the disputes; time lost by workers only indirectly affected is not included.

For these reasons the figures must only be taken as very rough estimates. They are all underestimates, but not necessarily to the same extent. They do, however, afford some indication of the relative importance of unemployment, sickness, and trade disputes as causes of lost time during these years. It is clear that unemployment has been more important than sickness, and sickness more important than trade disputes. Judged in this way, industrial disputes look comparatively insignificant. A survey of the thirty-two years between 1893 and 1924 shows that the loss of working time per head of the whole employed population averaged less than one day per year.¹⁸ In other words, if during these years there had been five instead of four Bank Holidays a year and no industrial disputes, the loss of working time

would have been the same. It must be emphasized, however, that the loss of time through trade disputes calculated in this way is a very incomplete measure of the total loss, because it takes no account of the loss through dislocation of trade and in other ways. In fact, an extra Bank Holiday and no trade disputes during these years would have resulted in a much smaller true loss than was actually incurred. Taking the above figures as they stand, we find that trade disputes account for a loss of about $\frac{1}{2}$ per cent. of the total working time; that, if we refer the figures for sickness in the table to the total who come under the National Health Insurance scheme, the time lost through sickness is equivalent to about 3 per cent. of full employment;¹⁹ and that, taking the monthly mean percentage of employment among insured workpeople as an index, we find that it varied in 1925 between 10.5 and 12.1 per cent.²⁰

We have mentioned the more important schemes whereby the State attempts to provide against ill-health and unemployment by assisting directly certain classes of persons. It is not possible to describe the many ways in which the State attempts to achieve the same ends by improving conditions rather than by assisting individuals. Sanitary and housing legislation, the provision of facilities for arbitration come to mind. It is equally beyond our scope to discuss the measures taken in certain industries to ensure a minimum wage, as a result of which the minimum remuneration of a million and a half workers in 35 various trades in Great Britain is fixed by Trade Boards,²¹ and probably of not less than 800,000 agricultural workers by the Agricultural Wages Boards.²² We have, however, still to say something concerning the State scheme for provision against old age.

State pensions are provided for persons 70 years of age and over who fulfil certain conditions. In 1920 the scheme was extended to blind persons over the age of 50. An applicant for a pension must show that his or her means do not exceed £49 17s. 6d. a year. In calculating means, account is taken of earnings in full,

but means not derived from earnings are subject to deductions. In 1925 the number of pensioners in Great Britain was 1,010,684, and the total sum paid out in the year was £24,906,000.²³ Unlike the schemes directed against ill-health and unemployment, the provision of pensions for the aged is not on a contributory basis, and thus the whole cost comes out of the proceeds of taxation.

COMPULSORY TRANSFER FROM RICH TO
POOR

CERTAIN features of the four great State schemes mentioned in the last chapter are very familiar. One feature of great interest and importance, however, is often forgotten. These schemes bring about a transfer in the form of money, goods, or services from rich to poor. Transfer of this nature must result from any scheme which fulfils either or both of the two following conditions. If the service is reserved for the poorer section of the population and the money to administer the service is raised compulsorily from the whole population, or if the service is shared by all but more money is contributed by the rich than by the poor, there will be transfer. Let us ask how the schemes we have mentioned operate when regarded from this point of view.

The two great National Insurance schemes provide benefits which are available only for the poorer section of the population. Salaried persons whose incomes exceed £250 a year do not come under the schemes. It is to be noticed that public social services are not available for the very poor alone. They are in general available for the wage-earning class and the lower paid among salaried workers. At the same time, since the fund out of which provision is made for these services is in part derived from taxation, those who do not benefit are compelled to contribute to the fund. The State Insurance schemes are not mutual insurance schemes in the sense that all contributors are entitled under certain circumstances to benefit directly. It may be argued, and with justice, that in a sense those who contribute but do not benefit directly, nevertheless benefit indirectly as a result of the improved health and well-being of the population as a whole. But this, though not irrelevant from one

point of view, does not affect the accuracy of the statement that from another point of view there comes about a certain redistribution of wealth as a result of these two schemes.

The operation of the non-contributory old-age pension scheme obviously involves redistribution of wealth. The whole fund whence the pensions come is derived from taxation and the pensions are strictly limited to poor persons. The position with regard to the schemes coming under the head of maternity and child-welfare is not so clear. The benefits are in some cases limited to certain classes of persons, whereas in other cases, while there appear to be no legal restrictions as to who may benefit, it is customary only for poor persons to avail themselves of the public services. The school medical services stand in a different position. Any parent, however rich, can send his children to an elementary school, where they will enjoy free medical services. But the rich do not avail themselves of these services, and thus here again, though not as a result of any limitation by law of the services to certain persons, there is redistribution of wealth.

Thus, these schemes all involve transfer from rich to poor because, while all contribute to the cost of the services, the poor alone benefit. In other words, the first of the two conditions mentioned above is fulfilled. It may also be noticed that they bring about transfer to some extent between persons within the same income class, from well to sick for example. It will be pointed out later that the second condition is also fulfilled. It will be shown that the rich contribute a larger proportion of their incomes by way of taxation than do the poor, and that, therefore, even if these schemes were all open to the rich and were used by them, there would still be transfer.

The schemes mentioned in the last chapter are not the only schemes in operation which bring about a redistribution of income. We are not thinking of the provision of public parks, libraries, baths, and similar

services and benefits. It is true that the cost of such services falls upon the whole community and that the benefits are for the most part enjoyed by, though not limited to, the poorer section of the population. We do not include them because the benefits are not in fact felt to constitute, and can only with great difficulty be converted into, a measurable addition to individual income. If, however, we are to make our survey of schemes complete which do result in a measurable addition to the incomes of the less well-off section of the population, partly at the expense of the rich, we must not omit mention of certain other schemes, of which the most important are education and poor relief.

The education services were mentioned in a previous chapter; they may be regarded as providing the necessary equipment for life. The benefits are open to all to enjoy, but in practice are not received directly by the rich. They fulfil our first condition. Poor Law relief was not mentioned in the last chapter, because it is to be regarded not so much as a provision against misfortune as a provision for those upon whom misfortune has fallen. In a later chapter we shall point out that, in spite of the services giving some equipment for life and of services aiming at provision against misfortune, failure in the form of poverty occurs on a large scale. The Poor Law system is, as it were, a net of so fine a mesh spread beneath the other schemes that all those who are not caught and sustained in days of trial by some other scheme are caught by the Poor Law and at least maintained alive. This scheme again fulfils our first condition.

There are other social services which result in redistribution, such as housing, hospitals, and workmen's compensation. Though of less importance from the point of view of the amount of money involved, they have been included in the following table together with those mentioned above. The table also includes an estimate of the cost of Widows', Orphans', and Old-Age Contributory Pensions.

TABLE LX.¹*Cost of Public Social Services.**Great Britain (1925 or latest available year).*

<i>Expenditure under the following Acts.</i>	<i>Expenditure met by Contributions (£Ms) from</i>					<i>Total</i>
	<i>Workers</i>	<i>Employers</i>	<i>Govt</i>	<i>Local Auth</i>	<i>Other Accounts</i>	
Unemployment Insurance	17.5	19.2	13.2	—	0.3	50.2
Health Insurance	13.0	14.0	7.0	—	5.0	39.0
Widows', Orphans', and Old-Age Contributory Pensions	11.0	11.0	4.0	—	—	26.0
Old-Age Pensions (non-contributory)	—	—	25.8	—	—	25.8
Education	—	—	46.7	35.7	7.0	89.4
Poor Law Relief	—	—	3.5	34.5	2.5	40.5
Housing of the Working Classes	—	—	8.6	1.0	8.8	18.4
Workmen's Compensation	—	12.0	—	—	—	12.0
Hospitals and Treatment of Disease	—	—	2.2	4.4	0.6	7.2
Maternity and Child Welfare	—	—	0.8	0.8	0.3	1.9
Lunacy and Mental Deficiency	—	—	0.8	2.4	1.6	4.8
Miscellaneous (including Unemployed Workmen, Inebriates, and Reformatory and Industrial Schools)	—	—	0.4	0.4	0.2	1.0
Total	41.5	56.2	113.0	79.2	26.3	316.2

This table deserves study. It is not possible to give the total number of persons benefiting under each scheme. No figures are, for example, available of those benefiting under housing schemes. It would, further, be misleading to give a total of those benefiting under the different schemes because the same person may benefit under more than one. For instance, all those coming under the Unemployment Insurance scheme also come under the National Health Insurance scheme. The total cost of all the services is about £316 millions. Of this sum £41.5 millions is derived from the contributions of those who benefit. The £26.3 millions under Other Accounts comes partly from the same source; thus, the £7 millions appearing against Education is in part derived from

the fees paid for education in secondary schools, though, as mentioned in Chapter XI, these fees represent only a portion of the cost of secondary education. The £56·2 millions paid by employers is perhaps best regarded as an enforced addition to wages. There remain the £113 millions derived from the proceeds of taxation and the £79·2 millions derived from rates. A considerable fraction of this £192·2 millions is contributed by those who do not benefit, though it is not possible to say what this fraction amounts to.

It is obvious that under any system in which all contribute to a fund but only some benefit, there is redistribution. It is also clear that the extent of the redistribution will depend upon the method of collecting the contributions. The method might take the form of a levy of a certain sum per head, rich and poor paying the same. It might take the form of the levy of a certain fraction of each man's income. In this case a rich man would pay absolutely more than a poor man, though relatively to their incomes their contributions would be equal. Again, the levy might take the form of extracting a fraction of each man's income, but a larger fraction the larger the income. In this case the rich man would pay both absolutely and proportionately more than the poor man. What is the method in use in this country to-day?

It is not possible to say anything regarding local rates. We have no information as to the incomes of those living in houses of different rateable values. Rough estimates, however, exist of the amounts paid in taxation by different classes of the community. Such an estimate was made by Sir Herbert Samuel in 1919, and by the Colwyn Committee on National Debt and Taxation in 1927, following largely in his footsteps. Taking the more recent figures of the latter we have the result shown in Table LXI.

The taxpayer is assumed to be married and to have three children under the age of 16. Also a distinction is drawn between two classes of income : (1) wholly

TABLE LXI 2

Colwyn Committee's Estimate of Taxation according to Income.

Income. £	Total Tax			
	1913-14		1925-6.	
	<i>Income Wholly Earned.</i>	<i>Income Half Investment</i>	<i>Income Wholly Earned.</i>	<i>Income Half Investment</i>
	£ s d	£ s d	£ s d	£ s d
100	5 7 6	6 12 6	11 17 6	12 19 6
150	6 9 2	8 7 2	17 9 3	19 3 3
200	7 17 10	10 10 0	20 7 9	22 12 9
500	22 0 10	35 8 0	31 2 4	42 0 8
1,000	52 0 10	82 19 2	110 5 4	144 1 8
2,000	97 15 10	168 11 6	304 19 0	386 10 4
5,000	333 4 2	477 14 2	1,161 0 0	1,477 3 0
10,000	805 17 6	1,177 14 6	3,117 1 0	4,007 18 0
20,000	1,652 4 2	2,587 9 2	7,492 1 0	9,745 19 0
50,000	4,179 4 2	6,767 8 2	22,242 1 0	28,863 19 0
	%	Percentage of	Income Taxed.	%
100	5.4	6.6	11.9	13.0
150	4.4	5.6	11.6	12.7
200	4.0	5.3	10.2	11.3
500	4.4	7.1	6.2	8.4
1,000	5.2	8.3	11.0	14.4
2,000	4.9	8.4	15.2	19.3
5,000	6.7	9.6	23.2	29.5
10,000	8.0	11.8	31.2	40.1
20,000	8.3	13.0	37.5	48.7
50,000	8.4	13.6	44.4	57.7

earned ; (2) half earned, half investment. It is of interest to note that in the first class the family with an income of £100 paid out in 1925-6 a higher percentage in taxation than the family with an income of £1,000. But, astonishing as this seems, it may be remarked that there has been a rapid progression in the proportion of tax taken from the larger incomes. In 1903-4, according to the estimate of the Colwyn Committee, the family with a £100 a year paid a higher percentage of the income in tax than the family with £50,000 a year ; and in 1913-14 the family with £50 a year paid the same

percentage as the family with £10,000 a year.² In the lowest income levels it is the indirect taxes which are important, especially the taxes on alcohol and tobacco, and the characteristic feature of indirect taxation is regression, that is, the lower the income, the higher is the proportion paid in tax. In the highest income levels, the direct taxes—income tax, super-tax, and death duties—overshadow all the rest, and steep progression has become the feature of these taxes.¹

Apart from the great interest which these estimates have in themselves, they are relevant to the problems of transfer. These calculations are not necessary in order to show that the rich contribute larger sums per head than the poor to the fund whence the social services are financed. That is common knowledge. Without such calculations we are, however, in the dark regarding the proportion of income contributed by rich and poor. It emerges from this estimate that the moderately well off contribute about the same proportion of their incomes as do the poor. The rich, on the other hand, contribute a much larger proportion of their incomes, and we reach the conclusion that those who do not benefit directly from these social services contribute a larger proportion of their income to the fund whence the benefits are derived than is contributed by any other section of the community.

Arising from the foregoing discussion there are two matters of interest which deserve comment. There are persons who contribute to, but derive no direct benefit from, these services. But there is no one who does not derive indirect benefit. Modern society is a community in the sense that it is not a mere aggregation of persons. The good or ill fortune of any single member of the community has a bearing upon the fortunes of all. Employers benefit indirectly but substantially in so far as the health of the people is improved by these services and the educational level raised. It is an entire misapprehension of the position to suppose that the transfer is wholly at the expense of the rich.

The second matter that is worthy of mention in this connexion takes us back to our discussion of the distribution of income, in an earlier chapter. The income there under review did not include benefits whether in cash or in kind arising under State schemes. When, therefore, we are considering the position of the poorer section of the population, it has to be remembered that their real incomes are augmented by these services to the extent to which the services are paid for by the rich. We observe that, in the light of Bowley and Stamp's investigation, the position of the wage-earners in 1924 appears to have been about the same as before the war. But since the earlier date new social services have been inaugurated and the previously existing services increased. It is not easy to find an adequate measure of this increase. It has been suggested by Professor Clay that one might take as a measure the change in the ratio of the aggregate expenditure out of local rates and parliamentary grants on social services to the total wage bill of the country.³ This ratio appears to have changed from about 8.2 per cent. in 1911 to about 12.4 per cent. in 1925 for Great Britain.¹

It follows that if we are to obtain an adequate comparison of the position of the wage-earners in 1914 and in 1924 we must not leave the social services out of account. The prevailing impression among those in close touch with concrete social problems and conditions is that the position of the poor has improved. The impression is correct, and the improvement is due in no small part to the extension of social services and to the transfer from rich to poor which they imply. 'In this transfer', writes Professor Clay, 'is to be found a part, at any rate, of the explanation of the improvement in the economic condition of the poor which even the war has not neutralized. The check to the rise in real wages has been compensated for by the increased provision of social services by the State and by compulsory advances in wages, in the form of insurance contributions, imposed on employers. At the same time the Insurance Acts

and the Trade Boards Act promoted a rearrangement or redistribution of income to the points at which the evil of poverty pressed hardest. Although the full extension and development did not come until after the war—indeed, has not come yet—there existed when war broke out, in a complete if undeveloped form, a policy for dealing with the evil of poverty.’³

VOLUNTARY PROVISION AGAINST
MISFORTUNE

STATE schemes intended to safeguard the poorer section of the population against the dangers which threaten them are of recent growth. Voluntary schemes having the same objects in view have long existed, and continue to flourish alongside the official organizations. To complete our picture, some review of the nature and extent of these voluntary organizations is desirable. They are, however, far more difficult to summarize than the official schemes, owing to their number and diversity. We may first attempt to make a list of the more important forms of voluntary effort as they exist to-day. This will raise the question of certain difficulties that meet any attempt to give exact figures concerning this subject. Having discussed these difficulties we can next inquire whether voluntary effort is playing a larger or smaller part now than before the war. Finally, we may refer in more detail to some of the more important forms of voluntary effort.

When dealing with the State schemes we calculated the annual contributions from various sources to the funds out of which are paid the cost of the public social services. It is not possible to follow this method when investigating voluntary organizations. Voluntary effort frequently takes the form of saving in many different ways, as and when possible, small sums of money, which may be used later as found desirable. All we can do in the way of summarizing this kind of effort is to attempt to calculate the accumulated savings of the poorer section of the population in certain directions. There are various organizations that we may call working-class provident institutions. They afford special opportunities to the small investor, and, while not legally confined to him

they are very seldom, if ever, used by the large investor. There are also certain forms of investment especially designed for the small investor. They can be, and are, used by the large investor also, though there is usually a limit to the amount which any one person may invest. The following table gives an estimate of the total savings of small investors accumulated under various headings of the more important types : it by no means covers all the openings for investment which are available for the person of small means.

TABLE LXII.

Accumulated Savings of Small Investors.
Great Britain : 1913 and 1925 or Latest Available Year

		Million £s	
		1913	1925
Post Office Savings Banks	Amount due to Depositors ¹	174 1	274 8
Trustee	" " " " " ¹	51 6	78 6
Railway	" " " " " ²	7 4	14 1
National Savings Certificates (estimated working-class holdings) ³		—	237 8
Government Stock held for Depositors in Trustee Savings Banks ¹		2 5	30 7
" " " " in Post Office, " ¹		26 6 4	183 7
Industrial Assurance Co's and Collecting Societies			
Total Funds (31st Dec) ⁴		67 1	166 0
Friendly Societies without Branches	Total Funds ¹	23 1	41 0
" " with " " (figure for 1913, estimated) ¹		24 0	40 6
Building Societies	Total Funds ²	450 1	141 3
Industrial Co-operative Societies	Share and Loan Capital and Reserves ⁵	60 1	153 5
Registered Trade Unions	Total Funds ⁶	6 5	12 5
		498	1 375

* These figures refer to the United Kingdom

It is, of course, possible for the small investor to invest in limited liability companies and, in fact, to save in precisely the same manner as does the rich man. At the same time, when shares are of large denomination or when stock can only be transferred in relatively large amounts, there are special difficulties in his way. We have, however, no knowledge of the extent to which these methods of investment are employed by the small investor, and no account is taken in the above table of small savings so applied. The table, in fact, only takes

account of the two forms of investment mentioned above. So far as what we have called working-class provident institutions are concerned, we have given the total funds, since the use of these institutions is confined to the small investor. In the case of Trade Union funds, figures exist for registered Trade Unions alone. The total under this head is therefore an understatement.

Those forms of investment which fall under the second heading present difficulties. It is known that large investors have bought Savings Certificates on a considerable scale. The Montagu Committee, however, estimated that at least one half sold up to the end of March 1922 had been bought by those classes whose needs they were primarily intended to meet. We have adopted this estimate in our table, and have taken one-half of the total amount sold up to 31st March 1926. It is also known that the Post Office Savings Bank and the Trustee Savings Banks are used by rich as well as by poor persons, though it is certain that their holdings in these do not amount to anything approaching the fraction which they hold of Savings Certificates. Again, to some extent the funds of Building Societies and Industrial Co-operative Societies have been subscribed by persons who do not belong to the working class. No estimate, however, exists, nor do there appear to be any data available for forming an estimate, of the extent to which the funds under these heads are held by other than small investors. Therefore we give the funds under these headings without deduction.

If it is said that our table exaggerates the savings of small investors the objection must be allowed, and has in fact already been admitted, so far as certain items are concerned. It does not follow that the totals of all our items exaggerate savings of this nature. This is so not only because certain items, as for instance Trade Union funds, are understated, but also because other forms of working-class savings are left entirely out of account. We have already mentioned the holdings of small investors in limited companies, and there are also their

savings in small clubs, which are now very numerous and concerning which no data exist.

Our table is, in fact, a very rough estimate. So rough is it that no stress whatever can be laid upon the precise figures obtained as the total of savings. But it is not without its uses. It may be said to show that the total savings of small investors are very far from negligible. More important is the possibility which the table affords of making a comparison between 1913 and 1925. Have the savings of small investors increased during this period? When comparing our totals for the two years we have to take into account the increase in population and the change in the value of money apart from interest on unspent funds. The index number for wholesale prices increased 60 per cent. between the two dates.⁷ Taking this fact into account, the 1925 figure would be equivalent to £859 millions at 1913 prices. Further, the population of Great Britain increased between 1913 and 1925 about 6 per cent.⁸ When allowance is made for this, and for the accumulated interest on unspent funds, the gap between the totals at the two dates would be still further reduced. But, though money doubles itself at 5 per cent. compound interest in 14 years, the gap is not likely to be bridged. Therefore, it is almost certain that small investors have been able to maintain their savings at the pre-war level. This is the more likely, since the habit of investing outside working-class provident institutions is generally thought to have grown during the period. Some figures recently published by a railway company showed that wage-earning employees subscribed for an issue of debentures to an unexpected extent. We therefore conclude that the aggregate savings of the small investor are not inconsiderable, and are being maintained in spite of the post-war depression and the fact that the State schemes of compulsory provision against misfortune have been greatly extended. There is no evidence that the advent of State schemes has led to a slackening of individual effort to provide against the chances and changes of life.

Among those institutions which we have called working-class provident institutions there are some the operations of which are on so large a scale and so closely affect the daily life of the mass of the people that further reference to them seems desirable. From both points of view Industrial Assurance Companies and Collecting Societies have the first claim to consideration. We depend for our information upon the Report of the Committee presided over by Lord Parmoor, supplemented by the annual reports of the Industrial Assurance Commissioner who was subsequently appointed to supervise and to some extent to control the activities of these bodies.

Industrial Assurance differs from ordinary assurance in that the sums assured are mostly small and the premiums collected weekly by agents. The Parmoor Committee found that the average premium on all industrial policies was under $2\frac{1}{2}d.$ a week, and the average sum assured was between £11 and £12. These sums are usually payable at death, and infants are frequently insured soon after birth.⁹ This form of assurance is effected both through profit-making companies and collecting societies. The system is essentially similar, however conducted. It is true that large profits are usually made by the companies and that no profit is made for shareholders by the societies, which take the form of 'mutual' institutions. The administration costs are, however, high in both cases, so that from the practical point of view the result is much the same for those who insure in either fashion. The extent of industrial assurance may be gauged from the fact that in 1918 the companies and societies were estimated to employ 70,000 agents, and that there were 51 million policies in force. In 1925 the number of policies in force had risen to 71 millions.¹⁰

The agents work on commission and receive as payment between 15 and 25 per cent. of the amounts collected. In addition they often receive the whole of the premiums for the first 12 or 16 weeks on any new business. 'It is not surprising, therefore,' the Report of the Parmoor Committee states, 'to find that about

44 per cent. of the total premium income on industrial policies is absorbed by expenses and commission and, in the case of the companies, by dividends to shareholders. Thus of every 1s. paid in premiums, $5\frac{1}{4}d.$ goes in expenses of one sort or another, and only $6\frac{3}{4}d.$ comes back to the assured in benefits.¹¹ Regarding other aspects of the system the Report, referring to 1918, states that the policies issued by the companies are almost 'invariably granted without the right to participate in profits' and they 'generally carry no right to surrender value . . . upon lapse'. The evidence showed, moreover, that a very large proportion of all the policies taken out did lapse within three or four years, and the bulk of them within a few months of the date of their origin. From figures supplied by ten offices (including most of the largest) it appears that nearly 5 million policies lapsed in 1913, and nearly 4 million of these had only been effected in 1912 or 1913. When lapses occur, the greater part of the money collected goes to the agents as commission. In fact, speaking generally, any margin in the premium over 'costs of assurance and economical administration' finds its way mostly into the pockets of the agents, although in assurance companies, as distinct from collecting societies, the shareholders secure a handsome portion. For instance, in the largest of all the companies, the shareholders 'received before the war £600,000 a year as dividends on a capital of £1,000,000, and latterly £400,000, in each case free of income tax'.¹²

Following upon the Report of the Parmoor Commission changes were made in the law, and, as already indicated, an Industrial Assurance Commissioner was appointed. The position in 1925 may be briefly summarized from his reports, which cover 16 companies and 182 collecting societies. The figures for both types of institution are combined in Table LXIII, where in addition are shown separately the figures for the two largest companies. The aggregate of sums assured for the combined group in 1924 was estimated at no less than

£930 millions. The average of the assurances in force with the companies was £14 8s., and with societies £12 6s. Over £45 millions were collected in premiums, mostly in pence and from door to door, during 1925, and for about a third of this amount the agents of one company alone were responsible.¹³

TABLE LXIII¹⁵
Industrial Assurance : Great Britain, 1925.

<i>Combined Returns from 16 Companies and 182 Collecting Societies</i>	<i>All Companies and Societies</i>	<i>Prudential (1924)</i>	<i>Pearl (1924)</i>
Number of Policies issued during the Year	M 8 8	M. 1 8	M. 1 2
Number in Force at the End of the Year	" 71 0	" 24 0	" 7 4
Total Funds at the End of the Year	£M. 184	£M. 87	£M. 15
Total Income	" 54 8	" 19 2	" 6 0
Amount of Income collected in Premiums Returned to the Insured	" 45 2	" 15 2	" 5 3
• { Death and Maturity Claims	" 15 3	" 4 7	" 1 9
{ Surrender Values of Lapsed Policies	" 1 3	" 0 9	" 0 0
Ditto as Percentage of Premium Income	% 37	% 37	% 36
Commission and other Expenses of Management	£M. 17 0	£M. 4 6	£M. 2 0
Ditto as Percentage of Premium Income	% 38	% 30	% 38
Miscellaneous Expenses (including in the case of Companies, Shareholders' Profits)	£M. 3 4	£M. 1 4	£M. 0 3
Amount added to the Funds carried forward	" 17 9	" 7 5	" 1 7

When we inquire into the working of the system since the publication of the Parmoor Report and the alteration in the law, we find considerable changes which appear to be mostly in the nature of improvements. In 1925 some 38 per cent., against 46 per cent. in 1920, of the total received from the insured population went to the agents as commission and to meet clerical and other administrative expenses and, in the case of companies, to pay dividends.¹⁴ It may be noticed that the Parmoor Committee did not suggest that the agents were overpaid. They heard evidence to the effect that they were underpaid and, while not expressing any opinion on the point, remarked that 'if there is underpayment, as asserted, it is not due to any undercharge on the assured

for the services rendered to them'.¹² The position of the agents may be not unlike that of certain retailers who assert that their incomes are not large and who, nevertheless, take a large margin on each transaction. They most certainly do not undercharge the consumer for the services they render, and, if they do not get a reasonable living out of it, the system must be faulty at some point. Looking further at the situation, it emerges from the figures shown in Table LXIII that, out of every £100 collected from the insured, only £37 was on the average returned to them in benefits of any kind, including the surrender value of lapsed policies. £18 millions, or about one-third of the total income from all sources, was carried forward as an addition to the funds for the following year. About 9 per cent. of the policies in force with collecting societies lapsed during the year. This is an improvement, since it represents only about half the pre-war percentage. Companies are not required to give particulars as to their lapsed policies. One small company, however, which began business in 1919 had issued 214,000 policies by the end of 1923, and it is estimated by the Assurance Commission that about 164,000 must have lapsed during those five years.¹⁸

It may be mentioned in passing that the opportunities of assurance for the wage-earning class are not limited to institutions using the costly services of agents. The Post Office gives facilities, but in 1925 only 1,128 contracts for annuities and 244 for life assurance were entered into.¹⁷ The system has been a dismal failure as regards size of business. The want of success is generally attributed to inadequate advertisement and to the fact that the system is not organized with sufficient regard for what the public require. There are also facilities for assurance given in connexion with the consumers' co-operative movement, and the administrative expenses of this form of assurance amount only to a relatively very small percentage of the premium income.

We may now pass on to Friendly Societies, which

also play an important part in the lives of the poorer section of the population. They are, however, not all of one kind. The principal object of some is to insure against sickness, accident, or death, or to provide superannuation pay. Others combine one or more of these benefits with the features of a Savings Bank, the funds being accumulated for the individual members or being divided out among them periodically. One of the most remarkable features of the Friendly Society movement during recent years is said to have been the growth of Societies in the Deposit class. Between 1914 and 1923, although their number in Great Britain only increased from 82 to 100, the membership increased from 572,000 to 954,500 and their funds from £4,899,000 to £11,255,000.¹⁸ Taking the figures for Friendly Societies orders and branches together, thus including the whole of the Friendly Society movement proper, it appears that in 1922-3, the latest year for which details are available, in Great Britain the work was undertaken by 22,500 registered organizations (including branches), covering a membership of nearly 7,800,000 persons. The expenditure on benefits was nearly £7,900,000, or more than £1 per member, about half the amount representing sickness benefit. The accumulated funds amounted to over £10 per member.¹⁹ In the ordinary Friendly Societies, as in the Trade Unions, a great deal of the expense involved in the collection of weekly contributions is saved by requiring each member to bring or send what is due from him to the lodge, court, tent, or branch to which he belongs, and this affords an opportunity for social intercourse which has been a valuable feature of these societies.

In addition to those we have mentioned there are various other societies registered under the Friendly Societies Acts. The most important are the Collecting Societies, which we have already considered along with Industrial Assurance Companies, to which type they most nearly conform. Other societies included under the same Acts are Working Men's Clubs, Loan Societies, Benevolent

Societies, and a miscellaneous group. Apart from Working Men's Clubs, which in Great Britain numbered 1,864 in 1923 with a membership of 673,145 and funds amounting to £1,800,000, these are neither numerous nor relatively important.²⁰

VOLUNTARY TRANSFER FROM RICH TO
POOR

SCHEMES of voluntary provision against misfortune do not involve redistribution of wealth as do the State schemes. Voluntary transfer from rich to poor does, however, take place. As in the case of compulsory transfer, we may distinguish between voluntary transfer which does not result in additions to individual income such as can be measured with some degree of accuracy, and transfer which does so result. As an example of the former we have the National Arts Collections Fund and the National Trust. The subscriptions come from the wealthy, or at least almost wholly from those above the income-tax limit, and the benefits can be enjoyed by all. As an example of the latter we may take voluntary hospitals. They are supported to a considerable extent by the rich, who do not themselves benefit by them directly, and the benefits accruing to the poorer section of the population can be regarded, as in the case of benefits under the National Health Insurance scheme, as additions to individual income. The latter alone come under the head of transfer in the restricted and more usual sense of the word. Let us ask what is known concerning transfer of this nature.

The answer to this question can soon be given. There nowhere exists any summary of information concerning charities, and it is with charities and their finances that we are now concerned. Charities as such are not compelled to register. Charities of certain kinds come under special regulations. Thus the War Charities Act of 1916 makes it unlawful for any war charity, if not exempted, to appeal to the public for subscriptions, whether in money or in kind, unless it is registered. The Blind Persons Act of 1920 applies the provisions

of the War Charities Act with certain modifications to charities for the blind.¹ The Charity Commissioners have some jurisdiction over endowed charities. It is not, however, the duty of any Government department or official to collect information about charities as a whole. The task does not seem to have been attempted by any private society or person. It would indeed be hardly possible to arrive at figures of any value as the result of private inquiry. For complete information on this matter we must wait until all charities are compelled to register and to render financial statements.

It is nevertheless evident from information we possess regarding certain classes of charities that these organizations are not only numerous but, taken together, they must play no insignificant part in redistributing wealth. Over 12,000 charities in England and Wales have been registered under the War Charities Act, and about 80,000 endowed charities come within the jurisdiction of the Charity Commissioners.² Evidently the total number of charities must be very large. It would be interesting to know whether they are now receiving less support than formerly. It is alleged that when men have to pay enforced contributions towards social services they restrict their expenditure on charity. This may be so, but, on the other hand, things do not always work out as expected. We found, for instance, that working-class savings have not in any case markedly diminished in spite of the increase in public social services. It does not seem to follow that, when more is done for people, they do less for themselves. It may also be that, when enforced contributions are increased, voluntary contributions are at least not proportionately lessened. All that we can do here is to illustrate the extent and importance of charitable organizations by one or two examples. We may select one from among those which are more or less permanent and one from among those of a temporary nature.

As an example of the former we may take voluntary hospitals in England and Wales. A Government

Commission in 1925 estimated that there were approximately 804 such hospitals with 50,460 available beds, or 1.33 beds per 1,000 of the population.³ In a Report referring to 1925, not issued under Government authority but covering the great majority of hospitals other than those in London, it was stated that about $2\frac{3}{4}$ million new patients were treated during the year, of whom half a million were in-patients.⁴ The total ordinary income was £4,801,000, or £127 per bed.⁵ Of this sum 63½ per cent. was raised by voluntary contributions, 21½ per cent. was earned, and 15 per cent. came from invested funds.⁶ Presumably the bulk of the invested funds was given originally by rich donors who have not themselves benefited. We do not know what proportion of the 3 millions subscribed annually comes from those who do or may benefit directly, and what proportion from persons who do not anticipate using these hospitals themselves. But, no doubt, the proportion which is obtained from the second source is large. The voluntary hospital system clearly involves transfer on a large scale.

The recent history of the voluntary hospitals hardly suggests that the support of the well-to-do is declining. The hospitals have been through difficult times. They received a grant of £700,000 out of the National Relief Fund⁷ and later a special Government grant of £500,000.⁸ The latter sum, after meeting certain urgent cases, was disbursed on a pound to pound basis against fresh money raised, in order to encourage the voluntary principle. This purpose was achieved and new money was raised to a far larger amount than the grant. It has not been found necessary to have recourse to public funds except on this one occasion. The comment of the Commission referred to above is as follows : ' It is a striking proof of the vitality of the voluntary system that in a period of unprecedented unemployment and heavy taxation the total income of the hospitals has been so well maintained.'⁹ Owing to the organization in many districts of schemes whereby small subscribers contribute to voluntary hospitals, it is likely that those who benefit

contribute a larger sum than before. It does not, however, follow that they contribute a larger proportion of the total required, because the expenses are rising owing to the higher standards of accommodation and treatment now thought desirable.

It is not so easy to find an example of a charity of a temporary nature. We may, perhaps, select the National Relief Fund. This fund was raised under unusual circumstances when, at the opening of the war, the nation was stirred out of the traditional paths of thought and action. Over £7 millions were raised. We have already noticed that £700,000 was paid over to the voluntary hospitals. The largest single sum granted to any institution was nearly £2 millions, which went to the Soldiers' and Sailors' Families Association.⁷

It has not been possible to do more than direct attention to this aspect of social life. The facts clearly suggest that the amount of money involved is large. There is at least no evidence that it is becoming smaller relatively to the national income. Whether or not charity is changing in volume, the methods of raising money for charitable objects are certainly changing in character. Street collections have, for instance, multiplied. There were no less than 385 street collections, or more than one a day, in London during 1925, and considering that the average cost of collection amounted to 12½ per cent. of the total amount raised, it may be doubted whether this modern development is in this one respect satisfactory.¹⁰ It may also be doubted whether other characteristics which street collections share with most modern methods of raising money are innovations that we ought to welcome. Now that charities have taken up the arts of the skilled advertiser, there is no possibility of any one charity standing out. They are all perforce compelled to follow the same paths. Even the dignity of a university has not stood in the way of blatant appeal for public support. These methods may for a time loosen the purse strings, but at the risk of gradually hardening the heart. The very word charity has long had unfortunate associations

in the democratic mind. Evolution along the present lines may ultimately kill it as an organized institution. This may conceivably be no great loss if the charity which 'vaunteth not itself and is not puffed up' survives.

POVERTY

IN the course of the preceding chapter we have incidentally touched upon certain defects in the social structure of this country. It is now time to study directly some of the more obvious signs of failure. If we confine ourselves to two subjects, poverty and crime, it is not because we forget or underestimate the importance of aesthetic and other defects, but because poverty and crime alone of the major failures can be described and measured with some approach to accuracy.

In the ninth chapter we discussed the national income. The analysis showed that even if all families shared equally in this income, we should all be poor as judged by any absolute scale. But income is not equally distributed. Some are rich while others are poor, and among the latter, as we are all aware, there are many whose income does not permit them to attain a decent standard of life. The question arises whether we can distinguish this poorest section and estimate the number of those who fall within it. It is evident that any distinction must be more or less arbitrary, because incomes are graded continuously. Nevertheless, in drawing a poverty line across society we can find a more substantial basis than our own casual impressions as to what constitutes poverty in the sense mentioned above. We can attempt to define a minimum standard of living and draw the line in such a fashion as to leave below it those whose income does not enable them to reach this standard. This was the method followed by the best known workers in this field—Booth, Rowntree, and Bowley.

The pioneer investigation was that of Charles Booth. The rich not only may, but do live alongside the poor and fail altogether to realize the implications of poverty unless their imaginative sympathy is aroused. Booth's work resulted in bringing the facts and implications of poverty into the social consciousness of the nation, and the further investigations of Rowntree and Bowley have kept them in full view. Booth's *Life and Labour of the*

People of London is the most elaborate inquiry ever published by a private person. Beginning in 1886 in East London, he made, largely with the help of School Board visitors, a classification of the people both by districts and by trades. These visitors, most of whom had been 'working in the same districts for years, were thoroughly acquainted with the people and the conditions under which they lived. From information gained in this way concerning families in which there were children of school age, he deduced the condition of the whole population, on the assumption that the untested portion would be at least no worse off, and would probably be better off, than the sample tested.¹

Booth divided the population into different classes, which he defined as follows:²

- A. The lowest class—occasional labourers, loafers, and semi-criminals.
- B. The very poor—casual labour, hand-to-mouth existence, chronic want.
- C & D. The poor—including alike those whose earnings are small because of irregularity of employment, and those whose work, though regular, is ill-paid.
- E & F. The regularly employed and fairly paid working class of all grades.
- G & H. Lower and upper middle class and all above this level.

The classes C and D, E and F, G and H can only be separated with difficulty, and they are placed together here since a classification into five grades seems adequate.

As given above, the definitions of the classes are somewhat vague. Booth amplifies his definition of the important classes B and C-D in the following words:³ 'By the word "poor" I mean to describe those who have a sufficiently regular though bare income, such as 18s. to 21s. per week for a moderate family, and by "very poor" those who from any cause fall much below this standard. The "poor" are those whose means may be sufficient, but are barely sufficient, for decent independent life; the "very poor" those whose means are insufficient

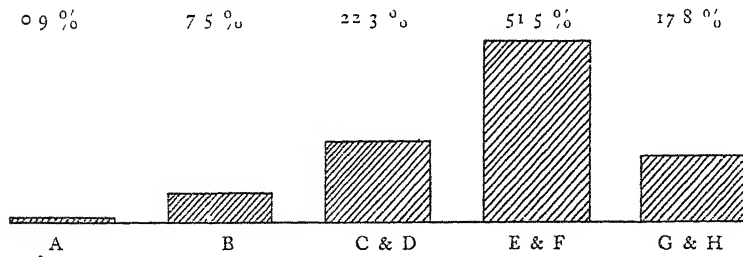
for this according to the usual standard of life in this country. My "poor" may be described as living under a struggle to obtain the necessities of life and make both ends meet; while the "very poor" live in a state of chronic want. It may be their own fault that they do so; that is another question; my first business is simply with the numbers who, from whatever cause, do live under conditions of poverty or destitution.' This amplification does make the definition more precise. Later investigations have reached, as we shall see, greater degrees of precision. It is apparent at the same time that whether the line drawn is sharp or not, the separation into classes is arbitrary. Poverty is a matter of degree and not of kind.

Booth's conclusions are given in the following table. They took into account the whole population of London at the date of the inquiry, with the exception of about 100,000 persons who were housed in institutions of one kind or another. The line drawn across the table is the Poverty Line. All those who fall below that line are at least 'poor' in Booth's sense of that word.

TABLE LXIV²*Booth's Classification of London Population.*

Class	Description	Number of People (000's)	Per Cent of Total.
G & H	Middle-class and above	750	17.8
E & F	Working-class, comfortable	2,166	51.5
<hr/>			
C & D	Poor	938	22.3
B	Very poor	317	7.5
A	Lowest	38	0.9
<hr/>			
All Classes.		4,209	100.0

The above proportions can also be illustrated graphically, thus



At the end of the next decade Mr. Seebohm Rowntree made a detailed investigation of working-class conditions in York, of which he published an account in 1901 called *Poverty: A Study of Town Life*. Every working-class family was visited and the number of families living in poverty was ascertained. Rowntree distinguishes between 'primary poverty', where 'total earnings are insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency', and 'secondary poverty', where the 'total earnings would suffice for the maintenance of merely physical efficiency were it not that some part of it is absorbed by other expenditure either useful or wasteful'.⁴ In other words, families living in 'primary poverty' have incomes which do not enable them to reach the defined standard, whereas those living in 'secondary poverty' have incomes sufficient for this purpose, but do not apportion their expenditure in the most judicious manner possible and therefore fail to reach the standard.

What is this standard adopted by Rowntree as allowing the maintenance of bare physical efficiency? It is an income permitting the purchase of the bare necessities of life, allowing nothing for beer, newspapers, tobacco, fares, recreation, or luxuries of any kind. The amount of necessary food was estimated by the careful planning of a diet just providing sufficient fuel energy for the worker and his family. It was rather better than prison fare, but less generous than that provided for able-bodied paupers in workhouses. The cost was calculated on the assumption that exceptional economy was exercised in buying and in housekeeping. He estimated that at the date of the inquiry an income of 21s. 8d. a week was necessary to enable a family of five—husband, wife, and three children—to live at this standard in respect to food and also to pay for rent, clothing, fuel and light, and household sundries such as cleaning materials, the cost of which was calculated on a similar low basis.⁵

It is evident that Rowntree's methods are more refined than those of Booth. The poverty line remains in, a

sense arbitrary as before, but its meaning is more definite. Applying this delicate test to his data, he found 9.9 per cent. of the whole population of York city to be living in 'primary poverty' and 17.9 per cent. in 'secondary poverty'. The addition of these two groups brings the poverty total to nearly 28 per cent. of the whole population.⁶ This result was sufficiently near to that reached by Booth for London to confirm many in the belief that the same proportion might be taken to apply to all towns. It must be remembered, however, that the definitions of poverty used in the two investigations are not identical.

In 1912-13 a similar inquiry was made by Bowley and Burnett-Hurst in Northampton, Warrington, Stanley, and Reading. Instead, however, of visiting every working-class household, a random sample of about 1 in 20 was taken.⁷ In this investigation no account was taken of 'secondary poverty': 'primary poverty' alone was under consideration. It is of importance to observe that the method employed differed somewhat from that of Rowntree, rendering possible only a rough comparison between the results. Thus Rowntree's minimum assumed the most economical expenditure in obtaining the scientifically necessary food constituents, but the diet was largely vegetarian. Bowley and Burnett-Hurst devised a less rigid standard with a closer relation to actual methods of expenditure; they allowed for some meat in the diet and raised the adult male standard by 9*d.* for this purpose. They also took a somewhat lower minimum than Rowntree for a child, making an allowance for age, and for the sex of those children over 14, while Rowntree took an average figure for all children under 16.⁸ Bowley and Burnett-Hurst adopted Rowntree's standards for clothing and sundries, but used rather different methods for calculating income. Unemployment and overtime were disregarded in the determination of 'normal weekly wages' except in the case of workers in the building trade, whereas Rowntree calculated what additions should be made for such items as insurance payments and

income from allotments, besides deducting the loss of income incurred on account of sickness and unemployment. Bowley and Burnett-Hurst included in the family income unemployment and health insurance benefit, strike pay, pensions, income from lodgers and investments, and deducted rent and national insurance contributions from the gross weekly income before comparison with their minimum standard. Rowntree treated the lodger as a member of the family and counted the whole of his income as an addition to the family income.⁹

The conclusions of the four-towns investigation are best given in the words of the authors. 'Our figures show that, quite apart from the "secondary" poverty of those whose income is injudiciously spent, and quite apart from accidents—or rather certainties—such as temporary sickness and unemployment, permanent, as distinct from occasional, poverty exists in certain places on a scale which is really appalling. Let us for a moment obliterate the boundaries between the different towns which we have described, and regard them as merged into one large city. The city contains about 2,150 working-class households and 9,720 persons. Of these households 293, or $13\frac{1}{2}$ per cent.—of those persons, 1,567 or 16 per cent.—are living in a condition of "primary" poverty. It is often implied that the wages of an adult workman are normally sufficient to bring up his family in decency ; but out of 2,285 adult males in our composite city as to whose earnings we have definite information, 729 or 32 per cent. were, at the time of our inquiry, earning less than 24s. a week.'¹⁰

It is to be noted that, stated in the above form, this conclusion is not comparable with that of Rowntree previously quoted, because it refers to the proportion of poverty in the working-class part of the population and not in the whole population. On another page, however, the authors state that 'the percentage of the whole population, including the upper classes of each town, living in poverty, exclusive of inmates of workhouses, &c., were respectively about 7, 12, $4\frac{1}{2}$ and 19.'¹¹

These figures are roughly comparable to the 10 per cent. found by Rowntree living in primary poverty in York, but only roughly comparable because of the differences in method noted above.

In 1924 the four-towns investigation was repeated by Bowley and Hogg, and another town, Bolton, which had been independently investigated in 1914, was added to their number to make five. The method adopted was as nearly as possible the same as before. About 4,000 families were investigated and an estimate was made of the families above, on, and below the poverty line. In the following table are shown the results at the two dates assuming full-time wages to have been earned. It is also possible to show in 1924 the position for the actual week of the investigation, an allowance being made for the fact that full-time wages were by no means always earned.

TABLE LXV¹²

Working-Class Families classified according to their Position relative to the Minimum Standard.

All 5 Towns together—Percentages (Lodgers excluded)

Percentage	Full-Time Wages		Actual Week's Wages
	1913	1924.	1924
Above Poverty Line	88	95	92
On " "	1	1	1½
Below " "	11	4	6½

How is this improvement to be accounted for? To answer this question let us first ask another. What do these investigations show the major cause of poverty to be? Bowley and Burnett-Hurst, writing in 1915 of the four-towns inquiry, said:¹³ 'It is thus proved that a great part of the poverty revealed by our inquiries—and we have no reason to regard their results as other than representative—is not intermittent but permanent, not accidental or due to exceptional misfortune, but a regular feature of the industries of the towns concerned. It can hardly be too emphatically stated that of all the causes of primary poverty which have been brought to

our notice, low wages are by far the most important. We would go further and say that to raise the wages of the worst-paid workers is the most pressing social task with which the country is confronted to-day.' In another passage they remark that 'actually one-half of the households below the poverty line at Warrington and Reading, nearly one-half at York, and one-third at Northampton, were living in poverty because the wages of the head of the household were so low that he could not support a family of three children or less'. Booth and Rowntree had also fixed upon the lowness of wages as a major cause of poverty. Thus we may take this to be a very important, if not the most important, factor in poverty, and the rise in the real wages of the worst-paid workers since 1914 may be taken as accounting for much of the improvement. Bowley and Hogg, writing of the 1924 investigation, remark that 'it has needed a war to do it (i. e. to raise the wages of the worst-paid workers), but that task has been accomplished, so far as rates of wages are concerned, though employment has not yet been permanently possible for all at these rates'. But this is not all. Families are smaller than in 1914. The worst-paid workers have not only larger real incomes, but also fewer calls upon those incomes.¹⁴

It may be of interest to attempt to bring the poverty-line standard up to date. Let us, therefore, calculate the weekly income which in January 1927 would have just enabled a family of husband, wife, and three dependent children (two between five and fourteen and one under five) to reach the condition of bare physical efficiency as outlined originally by Rowntree and modified later by Bowley, Burnett-Hurst, and Hogg.

Taking the Bowley standard, the expenditure on food for the above family in 1914 was about 14s. 2d., and on clothing 2s. 3d. per week.¹⁵ Food had risen 67 per cent. and clothing 115 to 120 per cent. by 1st January 1927;¹⁶ we may therefore put the expenditure then on food and clothing at 23s. 8d. and 4s. 11d. respectively. For lighting and household sundries, a

comparatively unimportant amount, we may accept the 1924 estimate of 1s. 6d. a week.¹⁵ We have still to allow for rent, fuel, and national insurance. Rent, which throughout our discussion may be taken to be inclusive of rates, will clearly vary from one town to another, and we have taken an average, based on the actual figures given in 1924 for Northampton, Warrington, Bolton, and Reading, weighted according to the number of households investigated in each town. This comes to 8s. a week. Stanley was omitted from the calculation because rental conditions there are affected by free colliery houses.¹⁷ In York the weekly expenditure on fuel was fixed by Rowntree at 2s. 6d. a week in July 1914,¹⁸ a distinctly higher figure than that adopted in the Bowley investigation, 1912-14, for the towns other than Stanley (which, because of the effect of free coal, may be again omitted); for Reading the allowance was 1s. 6d., and for the remaining three towns it was 1s. 3d., the corresponding allowances in 1924 being just about double these amounts.¹⁵ It is possible that the consumption and the price of coal in York may exceed what is normal in other places, and the season of the year when the investigation was made may have resulted in a relative reduction in the other towns. The Ministry of Labour gives as the pre-war expenditure on coal for the country as a whole an average amount of 1s. 6d. to 2s. 0d. a week. This estimate is based on the well-known budgets collected originally by the Board of Trade and still used in the determination of the official Cost of Living Index Number.¹⁹ When the increase in prices is taken into account, it agrees closely with an estimate published in 1921 in a Labour Report on the Cost of Living.²⁰ As it is in between the previous estimates mentioned, it would be not unfair perhaps on the whole to take 1s. 9d. a week as a general average for the expenditure in 1914 and 4s. 0d. as the corresponding figure in January 1927, since the price of coal had risen between 125 and 130 per cent. by that date.¹⁶ When the weekly

national insurance contribution, 1s. 4d., is added to the other items of weekly expenditure, we get as the total required for bare physical efficiency at the later date 43s. 5d.

The details of this estimate are brought together in Table LXVI, and alongside are shown the corresponding figures of another estimate designed by Mr. Rowntree but also brought up to a more recent date. This is known as the 'human needs' standard, and is described in his *Human Needs of Labour*. It is a more generous standard than the first. It does, for instance, allow something under the head of 'personal sundries' for recreation and the multitude of small and almost indispensable objects of expenditure such as drugs, stamps, writing-paper, and so on.²¹ The standard is therefore above that required for bare physical efficiency. It might be said to provide the bare essentials of a civilized life for a family of five. Neither Mr. Rowntree, nor any one else with a proper sense of human requirements, regards it as in any way a sufficient income. He says, in fact, referring to the dietary part of his standard, that he is not seeking to provide one that he considers desirable but one below which no class of workers should ever be forced to live.²² The meaning of this remark will be plain to the reader who studies closely what the standard provides. Any one unacquainted with Mr. Rowntree's book will be astonished to discover how narrow a margin is allowed over and above the absolute essentials of existence.

Rowntree's estimate of the cost of living at the human needs standard in July 1914 for a family of five amounted to 35s. 3d. The items comprised food 15s. 1d., rent 6s. 0d., clothing 5s. 0d., fuel 2s. 6d., household sundries 1s. 8d., and personal sundries 5s. 0d.¹⁸ In the following table these figures have been re-calculated for January 1927. The figures for food, rent, clothing, fuel, and household sundries have been revised by adding the percentage increases shown for the same items in the *Labour Gazette* between July

1914 and January 1927. The figure of 5s. 0d. for personal sundries given by Rowntree included 4d. for health insurance. In our table, insurance is shown separately and Rowntree's 4s. 8d. has been increased by 80 per cent., this being the rise in the cost of the miscellaneous group of commodities.¹⁶ The ultimate result is to bring the total for a family of five up to 63s. 6d. a week.

TABLE LXVI

Cost of Living, 1st January 1927.

A. BOWLEY'S 'BARE PHYSICAL EFFICIENCY' STANDARD.
B. ROWNTREE'S 'HUMAN NEEDS' STANDARD.

Commodity.	Expenditure required for			
	A. Bare Physical Efficiency		B Human Needs	
	s	d	s.	d.
Food	23	8	25	2
Rent	8	0	9	0
Clothing	4	11	10	11
Fuel	4	0	5	8
Insurance	1	4	1	4
Sundries				
Household	1	6	3	0
Personal	—		8	5
	43	5	63	6

When the items constituting these two totals are compared, the large differences between the figures for clothing will arrest attention. If food, it may be asked, costs so little more for the same number of persons on the human needs standard, why should clothing cost so much more? The explanation is that, if bare physical efficiency is to be maintained, food cannot be reduced below a certain amount, whereas clothing requirements can be made very small. Mr. Rowntree, in fact, based his figure for clothes on his first standard on the supposition that clothes would be mostly bought second-hand and only when absolutely necessary. For the human needs standard a more liberal wardrobe is allowed, with an occasional purchase of new clothes.

These figures are useful, but they must be employed

with caution. The conditions of life in the towns where these studies were made may not be similar in all respects to conditions in other towns, and, where this is so, some modifications would be required in the figures. Rents, for instance, differ from town to town, and the price of coal varies according to the distance from a coal-field. Again, considerable revision would be required in order to bring the standards into line with rural conditions. With these warnings in mind they may be employed as a rough measuring rod of the standard of life open to wage-earners. The standards may, for instance, be used to gauge the purchasing power of the wages in force at any one time, for the calculations can be readily brought up to date, month by month, by using the cost of living figures in the *Labour Gazette*. One can then judge how far weekly earnings, also published for various industries in the *Gazette*, enable families of this size to live at either one or other of the two standards employed.

What all this work does illustrate in the most painful fashion is the narrowness of life which the present level of wages imposes upon the wage-earning part of the population; and they constitute, as the earlier chapters have shown, the greater part of the population. Fully to appreciate how little even an income on the human needs standard provides, the reader must turn to Mr. Rowntree's works. It is a depressing fact that, in spite of all the scientific inventions which are now used to increase the productivity of human handiwork, the problem of widespread poverty should still be with us.

A long-forgotten political controversy once raged round the phrase 'Twelve millions on the verge of poverty !' The phrase-maker presumably had in mind the earlier of the investigations we have been discussing. He was apparently thinking of the 10 per cent. who could not, and the 15 to 20 per cent. who did not, reach the relatively poor standard of living defined by Mr. Rowntree. Since the war, certainly so far as those who cannot reach the standard are concerned,

the position shows some improvement. But even these investigations do not tell the whole of the story, because they do not take into account those who lack means of support and are housed in institutions. Though these persons may be living at or above Mr. Rowntree's standard, they must be numbered among the poor. Some of them are found in almshouses and similar places, but the majority are in Poor Law institutions and we may confine our attention to these. The Poor Law as a whole, however, is directly concerned with that type of failure with which we are now dealing, and we may briefly summarize the outdoor as well as the institutional form of relief. This is done in Table LXVII.

TABLE LXVII.²³

Persons in Receipt of Relief: England and Wales, Jan. 1st, 1926.

<i>Nature of Relief.</i>	<i>Number relieved (000s)</i>				<i>Total Number of Persons per 10,000 of Estimated Population</i>
	<i>Men</i>	<i>Women</i>	<i>Children.</i>	<i>Total</i>	
Outdoor	232	382	499	1,113	286 (77%)
Indoor	137	128	62	327	84 (23%)
Total	369	510	561	1,440	370

TABLE LXVIII.²³

Reported Causes of Relief.

<i>Classification.</i>	<i>Number relieved (000s)</i>				<i>Percentage of Total</i>	<i>No of Persons per 10,000 of Estimated Population</i>
	<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>		
Unemployment (Outdoor Relief only)	130	114	243	487	33.8	125
Sickness, Accident or Bodily Infirmary	135	173	24	332	23.1	245
Mental Infirmary	53	74	3	130	9.0	
Ill-health of a Dependent	4	1	0	5	0.4	
Other Causes (including Widowhood & Orphanhood)	47	148	291	486	33.7	
Total	369	510	561	1,440	100.0	370

In order that the figures may be appreciated, it should perhaps be explained that the qualification for Poor Law relief is destitution. Merit does not enter into the question of eligibility. In normal times, outdoor relief is only granted (*a*) in cases of accident, sickness, bodily or mental infirmity, (*b*) for burial, (*c*) to a widow, or married woman living apart from her husband. But in exceptional circumstances, as during the present industrial depression, outdoor relief may be granted to able-bodied persons. Thus some of those in receipt of unemployment benefit are also in receipt of outdoor relief. Indoor relief includes relief in infirmaries, lunatic asylums, and other specialized institutions, as well as in those general institutions formerly called workhouses.²³

It is possible to analyse the recipients of poor relief in other ways. Instead of placing all those in receipt of outdoor relief in one group and contrasting them with those in receipt of indoor relief, as in Table LXVII, we can combine those in receipt of relief for reasons other than unemployment and contrast them with those in receipt of relief through unemployment, as in Table LXVIII. The latter procedure is of most interest to us. The figures available do not distinguish those receiving indoor relief on account of unemployment, but it is officially stated that the number is probably very small. If then we ignore the small number relieved in institutions on account of unemployment, we find that 245 persons per 10,000 of the estimated population were in receipt of relief from causes other than unemployment on 1st January 1926. Let us now look at pre-war conditions. We find that the mean number of persons in receipt of relief, both indoor and outdoor, varied on the 1st January in the three years preceding the war from 218 to 248 per 10,000 of the estimated population.²⁴ Though we have no precise knowledge on the point, it does not appear that many of those in receipt of relief in pre-war days were compelled to seek relief on account of unemployment,

as the years 1911, 1912, 1913 were years of relatively good employment. The proportion of those in receipt of relief from causes other than unemployment is probably somewhat higher than before the war. 'In general, though not always, it is found that an increase in the number of persons relieved at home on account of unemployment is accompanied by a corresponding increase in the number of persons so relieved otherwise than

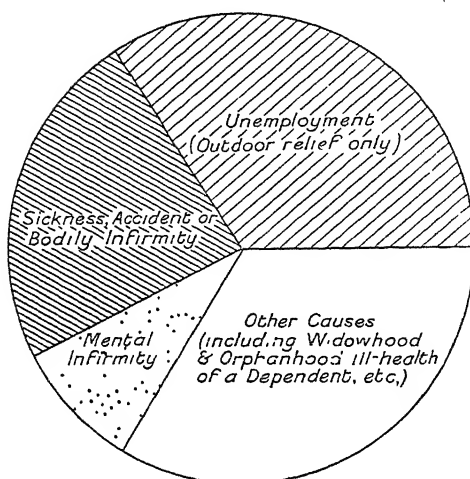


Diagram to illustrate Table LXVIII

on account of unemployment.' ²⁵ The remarkable fact which emerges is the existence of a mass of poverty, due to causes other than unemployment, remaining more or less of the same proportionate magnitude. The fluctuations in the proportionate numbers of those relieved are due almost wholly to fluctuations in employment. What then are these other causes? The figures in Table LXVIII throw some light upon the matter.

These other causes in order of importance are widowhood, orphanhood and other miscellaneous causes, bodily infirmity, mental infirmity, and ill-health of a dependent. Thus there is, on the one hand, poverty among the employed section of the population due in the main to irregular work or low wages, and, on the

other hand, poverty due to these other causes. This classification of the other causes is suggestive. Widowhood and orphanhood are clearly instances of bad luck. But some bodily and some mental infirmity is not bad luck—at least not in the ordinary sense. Part of it is due, not to unfortunate surroundings or experiences, but to deficient inborn equipment. To the existence of persons not adequately equipped at birth with mental and physical endowments we shall refer again in a later chapter.

XVIII

CRIME

CRIMINAL offences are infractions of the rules and regulations made by the State. As citizens we must therefore regard the existence of crime as evidence of failure in the functioning of our society. If the State cannot get its rules enforced, the basis of orderly life is threatened. But criminal offences are not necessarily offences against morals. The State may make bad rules, and it is nearly universally admitted that it may be meritorious to break such rules in extreme cases. More important is the fact that many of the rules concern matters so trivial that the breaking of them, however undesirable, cannot be regarded as immoral. It is undesirable that a bicyclist should ride after sunset without a light, and trivial offences of this kind are included among the less serious class of criminal offences known as non-indictable offences. When we come to the more serious class of indictable offences it is generally found that they are more than merely undesirable. Violence and fraud are cases in point. The question of morals or of responsibility does not, however, directly concern us. That crime is evidence of social failure is enough to make its prevalence relevant to our discussion.

Let us begin with a survey of indictable offences, which again are subdivided into the more serious tried at Assizes and Quarter Sessions and the less serious tried summarily.*

* For certain classes of offence it is optional whether trial is before a Court of Summary Jurisdiction or before a higher court.

TABLE LXIX¹*Indictable Offences. England and Wales.*

<i>Period or Year</i>	<i>Number of Persons tried.</i>		<i>Offences known to the Police</i>	
	<i>Average for Period or Total for Year</i>	<i>Per 100,000 of Population</i>	<i>Average for Period or Total for Year</i>	<i>Per 100,000 of Population.</i>
1893-97	53,174	175	82,258	270
1898-1902	53,833	167	80,121	248
1903-07	60,065	177	92,844	273
1908-12	66,301	185	102,573	287
1913	63,269	171	97,933	265
1920	60,617	161	100,827	268
1921 .	61,355	162	103,258	273
1922 .	58,177	152	107,320	281
1923 .	56,764	148	110,206	287
1924 .	57,374	148	112,574	291
1925 .	57,543	148	113,986	293

In this table the war years are omitted as being, in this* as in so many other respects, abnormal. Taking indictable offences as a whole and leaving for the moment any consideration of changes in the type of offence committed, it is evident that before the war the number of persons tried for indictable offences was increasing not merely absolutely but also in proportion to the population. They increased from 167 per 100,000 of the population during the quinquennial period 1898-1902 to 185 per 100,000 during 1908-12. In 1913 the figure was not quite so high. Since the war a decrease has taken place; the figure has never been higher than 162 per 100,000, while in 1923 and again in 1924 and 1925 the low figure of 148 per 100,000 was reached. But we must not be too ready to congratulate ourselves. The figures for offences known to the police do not flatter the post-war compared with the pre-war generation. Before the war the proportion per 100,000 of the population of offences known to the police was rising on the whole from quinquennium to quinquennium. There was a drop after the war to 268 in 1920, and since that date a steady rise to 293 in 1925. The decrease in the number of offences tried per 100,000 and the increase in the number of offences known to the police has led to a widening of the gap

between these two sets of figures. Before the war the gap was about 100. It is now nearly 150.

To what may this somewhat surprising state of things be attributed? It may first be noticed that the whole extent of the gap between the number of offences tried and the number known is not due to failure to detect the offenders. In many cases one offender commits more than one offence, and if all offenders were brought to trial there would still be more offences than offenders. We may next observe that there has been no change worthy of note in the proportion of policemen to population. There were in 1913 670 persons, and in 1925 682 persons, per policeman in England and Wales.² But there has been a change in the duties of policemen. They are now increasingly employed for administrative duties, especially in connexion with the control of traffic, and there are therefore proportionately fewer policemen than formerly available to detect offenders. It is also the case to some extent that incidents are now recorded as crimes that would formerly not have been so recorded.

The chief explanation, however, is the change in the type of crime committed. Crimes of violence have decreased, and crimes of shop-breaking, larceny, and fraud have increased. There is a much better chance of bringing to trial a man who has committed a crime of violence than a burglar or a man who has committed fraud. The former seldom takes elaborate pains to suppress evidence. Except in the case of murders the person to whom violence was done will be available to give evidence. The burglar on the other hand may be an expert at covering up his traces. He may wear gloves to prevent finger-marks being left behind. His crime in any case is premeditated, and as such is likely to be performed in such a manner that the detection is of set purpose made difficult. The same applies to crimes of fraud. Why crimes of this nature should have increased it is difficult to say. The guess may be hazarded that hard times and the difficulty of maintaining the standard of living have something to do

with it. However that may be, the analysis of these crimes in the following table shows that, whereas the number known to the police has since the war considerably increased, the number of persons brought to trial has not increased to the same extent.

TABLE LXX¹*Shop-breaking, Larceny, and Fraud.**England and Wales, 1919-25.**(Average Number for Period or Total for Year)*

	<i>Shop-breaking.</i>		<i>Larceny</i>		<i>Fraud.</i>	
	<i>Crimes known</i>	<i>Persons tried</i>	<i>Crimes known.</i>	<i>Persons tried</i>	<i>Crimes known</i>	<i>Persons tried</i>
1909-13	4,558	1,761	72,604	52,240	5,185	2,636
1919-23	7,691	2,549	68,957	44,622	7,453	3,250
1923	8,420	2,444	73,145	43,261	9,949	3,703
1924	8,939	2,582	74,742	44,267	10,247	3,247
1925	8,574	2,559	75,839	44,422	10,338	2,867

Still more remarkable is the decrease in crimes of violence since the war. Prophecies were freely made during the war to the effect that the population would be brutalized, and that the hundreds of thousands of men who had been trained to attack and kill and take it all in the day's work would not restrain themselves in days of peace. No prophecy seemed on the face of it more reasonable, but no prophecy has been more completely falsified by the event. Prophecy in the realm of social science is indeed a difficult art. We may account for the facts as we will. We may say that lust for violence has been satiated, or we may adopt other explanations. The facts are beyond doubt. The average number of crimes against the person known to the police for the five years 1909 to 1913 was 2,062. The annual average for the period 1919 to 1923 was 1,389. In 1923 the number was 1,269; in 1924 it was 1,259; in 1925 it was 1,495. There has been a corresponding falling-off in the minor offences of violence which are tried summarily as assaults. The annual averages for the four quinquennial periods 1899-1903, 1904-1908, 1909-1913, and 1919-1923, were respectively 64,186, 51,495, 43,320, and 37,908. The figures for

1924 were 34,897, and for 1925 34,832. This marked falling-off has taken place in spite of an increase in population.⁴

Of all crimes of violence murder is that which attracts most attention, and of all social phenomena murder is that which in this country remains most constant in its absolute incidence. During the last 50 years, despite the increase in population, murders have remained steady at about 150 a year. There were exactly 150 in both 1923 and 1924; in 1925 the number rose to 160, 35 of which were cases of the murder of infants under one year of age. From an analysis of 390 cases of supposed murder taking place in 1912, 1913, 1920, and 1921 (excluding infanticide and deaths due to illegal operations), we have the following particulars: in 83 cases the murderer committed suicide, in 288 cases 313 persons were arrested, while in 19 cases there was no arrest. Of the 313 persons 64 were discharged or acquitted, 94 convicted and sentenced to death, 74 convicted of lesser crimes, 70 ordered to be detained as being either under 16 or insane, 6 were found insane before trial, 1 died, 1 was shot in resisting arrest, and 3 were dealt with in foreign countries.⁵

When we turn from indictable to non-indictable offences we find a remarkable decrease despite the increase in population. The following table (p.200) shows that the decrease in the annual average number of non-indictable offences when the post-war period is compared with the immediate pre-war period, is in the neighbourhood of 100,000.

The decrease in non-indictable offences would be much greater were it not for the increase in highway offences. Highway offences are chiefly in connexion with motor-cars, and such offences rose from 3,879 in 1904 to 150,733 in 1925. It has been estimated that, if all offences in connexion with motor-cars were taken into account, about one out of every three or four minor offences occupying the police is committed by a motorist.⁶ If we abide strictly by the official definition of crime,

TABLE LXXI *

Non-Indictable Offences. England and Wales.

	<i>Annual Average, 1899-03.</i>	<i>Annual Average, 1909-13.</i>	<i>1913</i>	<i>Annual Average, 1919-23</i>	<i>1923</i>	<i>1924</i>	<i>1925.</i>
Offences against Highway Acts (Number of Motor- Car Cases)	41,766 (1,626*)	64,906 (16,100)	76,011 (25,701)	144,412 (71,593)	166,195 (99,906)	195,922 (123,774)	224,701 (150,733)
Offences against Police Regula- tions.	129,134	100,663	106,509	68,913	65,908	67,050	67,311
Drunkenness .	213,803	189,204	204,038	80,698	81,659	83,687	80,412
All Other Offences	345,165	298,232	293,732	245,951	232,844	237,794	238,377
Total	729,868	653,005	680,290	539,974	546,606	584,453	610,801

Including offences in relation to heavy locomotives

then motorists appear to be the most criminal section of the population. The second remarkable feature of Table LXXI is the decrease in drunkenness. The post-war annual average is considerably less than half the pre-war annual average, despite the increase in population. For this improvement more than one reason can be given: many people are not as well off as they were before the war, and the price of alcohol has gone up considerably on account of the higher duties levied upon it. Also, though the price is higher, the dilution is greater. Some parts of the improvement can no doubt be related to the restrictions upon the hours of opening of public-houses, though we may perhaps credit ourselves at the same time with a rising standard of decency of which the toleration of restrictions upon closing may itself be a sign.

When we review the situation to-day, we find no reason to be despondent. We cannot congratulate ourselves upon any marked decrease in crime as a whole, though there have been improvements in certain important aspects. We may, however, take credit for changes in the treatment of those convicted. These changes may be illustrated from figures as to imprisonment and as to the fate meted out to juveniles. In 1904 198,395 persons were imprisoned: in 1924 this

number had been reduced to 44,237. The reduction is due to the operation of two acts. Under the Criminal Justice Administration Act of 1914, time is allowed for payment when fines are inflicted upon convicted persons. In 1904 no less than 107,625 of the 198,395 persons imprisoned were imprisoned in default of payment of fines. In 1925 only 14,542, or 3 per cent. of the total fined, were imprisoned for the same reason. The Probation Act allows persons who have been found guilty to be released without punishment, though certain conditions may be imposed. In 1925 some 84,580 persons were so discharged. Nearly half the persons found guilty of the more serious indictable offences in Courts of Summary Jurisdiction were dealt with in this way. The great bulk of the minor non-indictable offences were disposed of by the infliction of a fine.⁷ Of the 27,801 juveniles proceeded against in Juvenile Courts in 1925, 15,633 were released without punishment though the charge was proved. Five juveniles only were imprisoned. In 7,578 cases fines were inflicted, 1,130 children were committed to a reformatory or an industrial school, 452 were whipped, and the rest were otherwise dealt with.⁸

A word may be said regarding the other aspect of our legal system. Civil judicial statistics give some indication as to the degree to which we fail to compose our domestic differences and resort to the impartial arbitration of the courts. The quinquennial averages indicate a decline in the absolute number of proceedings begun, which is significant when the increase in population is taken into account. If we consider the post-war period year by year, we notice an increase from 1920 to 1924 and then a slight drop in 1925. About 9 in every 10 of these cases are begun in County Courts, and out of every nine cases begun in County Courts about eight are concerned with amounts not exceeding £20. Divorce Court proceedings numbered 3,208 per annum in 1921-5, as against 1,244 in 1911-15, and 948 in 1906-10.⁹

TABLE LXXII¹

*Total Civil Proceedings begun in all Courts.
(England and Wales.)*

<i>Period</i>	<i>Quinquennial Averages (000s)</i>
1901-05	1,445
1906-10	1,479
1911-15	1,291
1916-20	641
1921-25	1,038

The mention of juveniles on a previous page leads to a reference to one fact of general interest in connexion with crime. Of the 27,801 juveniles proceeded against in Juvenile Courts in 1925, 26,548 were boys and 1,253 were girls.⁸ Where adults are concerned, males again figure far more prominently than females. Of those coming up for trial at Assizes and Quarter Sessions in England and Wales in 1925, 91 per cent. were males and 9 per cent. females. 88 per cent. of those charged with non-indictable offences in 1925 were males.¹⁰ In large part the higher incidence of crime among males is clearly due to greater exposure of males to risk, if we may apply a phrase usually employed in connexion with disease. Men are out and about more than women and are therefore more liable to come into conflict with the law. It may be, however, that this is not by any means the whole explanation of the difference between the sexes in this respect. It has been suggested that the inborn temperamental characteristics of the male are likely to lead him into trouble, whereas the temperament of the female may tend to keep her out of trouble. The male is more restless, pugnacious, adventurous, and quick to action. These qualities have their value, but they lead to conflicts with the police. In a public space recently laid out in Liverpool there is the following notice: 'Boys damaging the shrubs or flowers will be prosecuted.' It is apparently supposed that girls will never commit such offences.

We find ourselves at this point approaching a problem that we cannot discuss, namely the cause of crime;

but we may perhaps explore a little further the suggestion contained in the preceding paragraph that some persons are more innately disposed to crime than others. No one is born a criminal, just as no one is born diseased.* But some persons are born with a predisposition to catch diseases more quickly than others when they come in contact with infection. May not some types be more predisposed than others to commit crime when temptation offers the chance? We found in the last chapter some reason to suspect that all the poor are not poor merely because of ill luck in their surroundings, but that some of them were ill-equipped by nature to succeed in the struggle for a livelihood. May not something similar be the case in regard to the struggle against temptation?

The most obvious method whereby an answer may be found to this question is to institute a comparison between offenders and the population in general, and to attempt to ascertain whether offenders differ in respect of their mental and physical endowment from the average member of society. Such comparisons are not easily made. Care must be taken that the offenders are compared with the average member of that section of society from which they are drawn. This precaution is necessary because different sections of society may not have the same endowments. The results of two careful investigations may be quoted. Professor Cyril Burt has made an exhaustive analysis of numerous cases of juvenile delinquency. He obtained full details about these young offenders and their families, and at the same time obtained similar information for normal children of the same section of society. All instances of congenital or inborn mental or physical peculiarities were noted. He found that congenital factors were 'recorded among delinquents rather more than three times as often as among non-delinquents'. When the major congenital factors alone were considered, they were found present among 36 per cent. of all the boy and

* If we except those born syphilitic

among 41 per cent. of all the girl delinquents. It follows that 'in well over one-third of all the cases, but in rather less than one-half, some deep constitutional failing proves the primary source of misconduct'.¹¹

Dr. Goring made an elaborate investigation into three thousand convicts, and among other matters he investigated their physical characteristics. Let us consider his findings in relation to stature. He divided the convicts into eight groups according to the occupational class from which they were drawn, and then compared the criminals in each group with the average of the occupational class from which they came. He found that the stature of the criminals in each case was about two inches less than the average of their class.¹² Turning to his findings regarding the mental characteristics of criminals, we discover that here again criminals seem on the average to differ from the general population. His conclusions are that not less than 10 per cent. and not more than 20 per cent. of criminals are mentally defective, whereas the proportion of mental defectives among the general population is very much less.¹³ What this proportion is will be discussed in the next chapter. It may be said that it is probably less than 1 per cent.

It would thus appear that offenders are on the average somewhat less well equipped mentally and physically than the rest of the population. It is important not to misunderstand this statement. It does not mean that all mental and physical defectives are criminals. That is obvious nonsense. Nor does it mean that all criminals are defectives of one kind or another. That is almost equally obviously untrue, and it is well brought out by a further analysis which Dr. Goring made of his figures concerning the physique of criminals. He found that 'offenders convicted of violence to the person are characterized by an average degree of strength and of constitutional soundness considerably above the average of other criminals and of the law-abiding community'. There is also reason to think that persons convicted of certain kinds of fraud are not inferior in

mental capacity to the rest of the community.¹⁴ The statement made above, merely means that those who are less well equipped mentally or physically than the average are more predisposed to catch the infection of crime than are normal persons. 'Heredity appears to operate', says Professor Burt, 'not directly through the operation of a criminal disposition as such, but rather indirectly, through such constitutional conditions as a dull or defective intelligence, an excitable and unbalanced temperament, or an over-development of some single primitive instinct'. To physical defects he attributes considerably less importance than to mental peculiarities.¹⁵ Persons constituted as described by Professor Burt are more likely to become criminals than others. That is all; but it is enough to make the inborn equipment of our population a matter of interest and importance because of its bearing upon social structure.

Attention may be drawn at this point to a small investigation which possibly has a bearing upon the problems raised in connexion with poverty and crime.¹⁶ It is founded upon tables in the census giving the last occupation which persons in prisons, Poor Law institutions, and lunatic asylums claim to have followed. Since the total number of those following each occupation is also known, it is possible to compile lists showing the relative frequency with which those who have followed different occupations get into prison, come under the Poor Law, or enter asylums. When such lists are drawn up for the last three censuses it is found that the order in which the occupations occur is markedly similar, not only when those in any one form of institution, say prison, are compared census by census, but also when those in the three institutions are compared one with another. Thus, generally speaking, an occupation with a high frequency of lunatics tends to show a high frequency of paupers and criminals, and an occupation with a low frequency in any one institution tends to show a low frequency in the other institutions. The first conclusion that one is tempted to draw from this

curious result is that poverty, crime, and lunacy are somehow related problems. But if so, what relates them? It is very difficult to detect any common feature among occupations high or low in the list. It does not seem that low wages, casual work, or any similar characteristic, is common to those coming near together. One possible explanation, however, suggests itself: certain types of lunacy are generally held to have a basis in inheritance. So far as this is true, a high incidence of lunacy in any group of persons may be taken as evidence of poor average mental endowment in that group. Those following an occupation with a high frequency of lunacy may not, therefore, have so good an average mental endowment as those in other occupations. Is it possible that this poor mental endowment is also the cause of the high frequency of poverty and crime in these same occupations? May not poor average mental endowment be in fact the characteristic which relates poverty, crime, and lunacy?

XIX

INBORN QUALITIES

MORE than once in the course of our discussion we have been led to notice the possible importance of inborn qualities in shaping the social structure of this country. The occupation which a man follows is not wholly the result of educational, social, and other opportunities which have come his way. His natural gifts play some part in determining what occupation he takes up, and an even greater part in determining whether he does his work well or badly. Again, when dealing with poverty and crime, we found reason to suspect that the legal poor and the inmates of prisons do not possess on the average a natural endowment equal to that of the rest of the population.* Hitherto we have noticed these facts and then passed on. It is now time that we examined the position more closely.

It is not possible to discuss here the very difficult question as to how far differences in natural gifts determine differences in achievement. It is universally allowed that they have some influence. No one supposes that it is possible to put a sharp cutting-edge on a leaden blade. A certain proportion of boys and girls in elementary schools, for instance, are admittedly unable to profit from higher academic training in universities owing to lack of intellectual gifts, although they may be well endowed with manual dexterity and able to profit from training of eye and hand. This being so, our task is to survey what is known regarding the distribution of natural gifts in the community.

A question first arises as to the possibility of measuring natural gifts. It is not difficult to measure some physical and mental characteristics. We can measure a man's stature, though it is not so easy to test his power of

resistance to disease or to assess quantitatively his health. We have a rough gauge of certain features of mental ability in examinations, though it is very difficult to assess temperamental characters such as vivacity and power of concentration. The only mental characteristic of great importance, in fact, of which we have extensive measurements at the present day is intellectual performance. Measurements have not been made on a large scale which enable us to say anything about the distribution of many important physical characters, or about important mental characters other than the intellectual. Therefore our discussion of inborn qualities must be confined to inborn intellectual qualities.

We must not, however, proceed too fast. It may be agreed that we can measure intellectual performance, but it may be held that what we are measuring is acquired and not inborn, or is a combination of inborn qualities and acquirements. This again is a matter that cannot be discussed here. It must suffice to say that, in the opinion of those best qualified to judge, the modern technique of intelligence-testing does measure innate endowment. It may be that all the effects of environment are not eliminated. But even if this be so, the results of intelligence tests when skilfully applied are accepted as generally indicative of inborn differences. We are therefore in possession of a method by means of which we can go some way towards investigating the distribution of this important native quality.

An extensive investigation of the distribution of intelligence was carried out by Duff and Thomson in Northumberland in 1922.¹ All children in elementary schools and most children in secondary schools between the ages of eleven and thirteen in Northumberland (Newcastle and Tynemouth excepted) were tested. In all, there were 13,220 elementary school pupils and 405 secondary school pupils between these ages, making a total of 13,625. The I.Q., or Intelligence Quotient, of each child was ascertained. For the benefit of those not acquainted with the subject, it may be explained that

the I.Q. is independent of age, and that an I.Q. of more or of less than 100 is indicative of an intelligence above, or below normal. The results may be tabulated as follows:

TABLE LXXIII

Distribution of Intelligence in Northumberland.

<i>Intelligence Quotient.</i>	<i>Girls</i>	<i>Boys</i>	<i>Total</i>	<i>Per Cent of Total.</i>
140 and over .	4	12	16	0.1
130-139	49	80	129	1.0
120-129	318	414	732	5.4
110-119	1,146	1,129	2,275	16.7
100-109	1,765	1,833	3,598	26.5
90-99	1,779	1,757	3,536	26.0
80-89	991	981	1,972	14.5
below 80	622	715	1,337	9.8
	<hr/> 6,674	<hr/> 6,921	<hr/> 13,595	<hr/> 100.0
Spilt Papers	21	9	30	
	<hr/> 6,695	<hr/> 6,930	<hr/> 13,625	

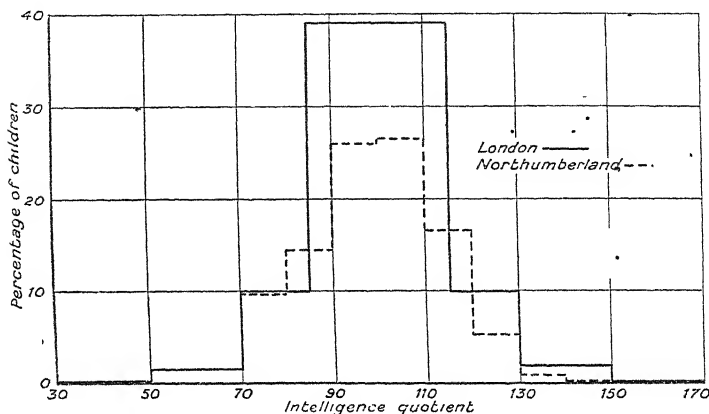
With these figures may be compared others, given in a publication of the Medical Research Council, summarizing the results of testing the intelligence of a large number of London schoolchildren. As before, the children are divided into groups according to their I.Q.s, but in this case the total numbers falling within each group are not given, but only the percentages which those in each group form of the total tested.

TABLE LXXIV.²*Distribution of Intelligence among London Schoolchildren.*

<i>Intelligence Quotient.</i>	<i>Percentage of Total.</i>
Over 150	0.2
130-150	2.0
115-130	10.0
100-115	38.0
85-100	38.0
70-85	10.0
50-70	1.5
Under 50	0.2
	<hr/> 100.0

The results of these investigations can be seen in a better light when they are graphed. It is then clear

that most of those tested are moderately gifted with intelligence. There are about the same number definitely handicapped by a low native intelligence as there are unusually well endowed with natural gifts.



Distribution of Intelligence among London and Northumberland Schoolchildren

It may be observed in passing that in all probability the situation is substantially similar for mental and physical characters. In other words, we have reason to believe that all mental and physical characters have an inherited basis and that, in respect of any one character, most members of the community are moderately gifted, whereas a few are unusually well gifted and a few unusually deficient. We believe that we should be led to construct histograms not unlike the above if we could measure in the population at large the distribution of power of resistance to disease, of vivacity, of power of concentration, or of any other physical or mental character. At present we only have evidence concerning the distribution of intelligence, and we must confine ourselves to a consideration of this important human attribute. This evidence raises a number of problems. We may first turn our attention to those who are very poorly endowed and ask how many of them there are, because some of them are likely to

become a burden upon the community sooner or later. We may next ask whether intelligence is equally distributed among the various occupational and other classes. Finally, we may inquire as to the existence of any machinery for sifting the more from the less intelligent and directing them into occupations suitable to their intelligence.

Those very poorly endowed with natural intelligence are classed together as the mentally deficient. But the mentally deficient should not be confused with the insane. Though not strictly accurate, it is not misleading to think of the former as persons whose innate mental capacities are small, i.e. 'aments', and of many of the latter as persons who are not necessarily endowed with less than normal intelligence, but whose intelligence has become deranged, i.e. 'dements'. Leaving the latter for mention later, let us concentrate upon the mentally defective. They range from idiots, the most seriously afflicted, at one extreme, to those who are merely feeble-minded at the other. Those individuals are classed as idiots who are wholly unable to look after themselves and guard themselves against common physical dangers; the feeble-minded are those who require least supervision and help; and there is an intermediate class known as imbeciles, who, though less gravely afflicted than idiots, are incapable of managing themselves and their affairs. The mentally deficient group as a whole is not qualitatively distinguished from the rest of the population: the dividing line is arbitrary. Similarly the three classes of mentally deficient individuals are not qualitatively separable. They represent grades of defect distinguished for convenience. It is of the essence of the whole matter to regard the population as continuously graded in respect of intelligence as it is in respect of income. Just as the class of non-income-tax payers is arbitrary, so is the class of mental defectives. There is not any general agreement as to the amount of intelligence, measured by tests, which would justify placing an individual among the feeble-minded. Such an agreement is hardly to be expected, inasmuch as mental deficiency is a legal term:

the criterion for children is whole or partial ineducability, while for adults the test is usually social incapacity. Therefore doctors engaged in examining doubtful cases do not abide by the results of intelligence-tests alone, even when they use them. It may be said, however, that most of those who are classed as feeble-minded have an I.Q. between 50 and 70. Thus, out of 2,712 children in special schools for the feeble-minded in 1925, 22 per cent. had an I.Q. of more than 70, 61 per cent. between 50 and 70, and 17 per cent. under 50.³

Before the Royal Commission of 1904 made an estimate, there was no calculation of any weight as to the number of mentally deficient persons in this country. This estimate refers to 1906, and is as follows:

TABLE LXXV.¹

*Estimated Number of Mentally Deficient Persons
England and Wales. Jan. 1st, 1906.*

<i>Grade</i>	<i>Total</i>	<i>Per 1,000 of Estimated Population.</i>
Idiots .	8,654	0.25
Imbeciles	25,096	0.73
Feeble-minded { Adults	54,114	1.57
{ Children	50,665	1.47
	<hr/> 138,529	<hr/> 4.03

Since that date, machinery has been evolved by the operation of which certain figures as to the number of mentally deficient individuals are available annually. This machinery in outline is of the following nature. Under the Education Act of 1921 local education authorities are required to ascertain what mentally deficient children there are within their areas, and to make special provision for them. Under the Mental Deficiency Act of 1913 county and county borough councils have the duty of ascertaining, not how many defectives there are in their areas, but how many there are with whom they have a statutory duty to deal. The latter are defectives who, for instance, are found neglected, abandoned, cruelly treated, guilty of a criminal offence, undergoing imprisonment, or notified by the local educa-

tion authority as incapable of receiving benefit in a special school. It will be observed that we ought to get a complete census of mentally defective children of school age through this machinery, but at best it can give us only an incomplete census of defectives of other ages.

As the machinery works, however, the expected information is very incomplete, for two reasons. Different definitions of mental deficiency are adopted in different places. Further, authorities vary notoriously in the energy with which they carry out their duties. Some are active, while others close their eyes to the existence of deficiencies within their areas. But we must make the best of such figures as exist. In 1925 the number of children certified in England and Wales as mentally defective amounted to about 33,000, or 6.7 per 1,000 of children in average attendance at public elementary schools. This is an average figure. The actual returns from different areas varied from 0.3 per 1,000 to 23 per 1,000. While in some areas the number may be overestimated, the more usual tendency is certainly towards underestimation.⁵ In 1923 the Chief Medical Officer of the Board of Education estimated that 8.6 per 1,000 children were mentally defective.⁶ It would now seem that in the opinion of most authorities this last figure is too low, and that in all probability somewhere about 10 per 1,000 children are defective. If this is correct, then only about two-thirds of all mentally defective children have as yet been certified.

From what has been said above, it is clear that existing machinery is inadequate to provide an estimate of the incidence of defect in the rest of the population because only certain classes of defectives are 'ascertained'. When we examine these figures we find the same difficulty as in the case of the children. While in England and Wales as a whole those 'ascertained' amounted in 1925 to 1.46 per 1,000 of the population, the figures from different areas varied from 4.49 per 1,000 to 0.12 per 1,000.⁷ It is most certainly the case that not all those

who should be ascertained have been ascertained. Further, the ascertainable form only a proportion of all defectives. Therefore the number ascertained up to date affords no guide to the total number of defectives. Can we form any estimate of their number from other sources? Since the situation in respect of one section of the population, namely schoolchildren, has been fairly closely examined, at first sight it would not seem unreasonable to apply the percentage found for schoolchildren to the population as a whole. This would give a total of some 380,000 mental defectives for England and Wales. This procedure would seem to be justified by the fact that, generally speaking, mentally defective children do not grow out of that condition. If there is a higher death-rate for defectives than for normals, the total would be reduced. But the reduction could not be large. It scarcely seems likely that the figure would come down to less than 350,000 on this account. This total, however, is much higher than any of the authorities on the subject are prepared to accept. Some have tentatively suggested 190,000 as the total for the country. The explanation of the discrepancy would seem to lie in the fact that the criterion of mental deficiency for adults is not the same as that for children. The criterion for adults is social inefficiency, while for children, as pointed out already, it is ineducability whole or partial. It may well be that the proportion of children who are wholly or partly incapable of profiting from ordinary education is much greater than the proportion of adults who are socially inefficient. But, while this may explain the facts as regards current estimates, it does not in any way affect the conclusion that about 10 per 1,000 of the whole population are so poorly endowed with intelligence as to be incapable of profiting from ordinary education when of school age. The community is thus burdened with a whole army of persons who, by reason of inborn mental defect, are unable to lead full lives. How many there are equally unfitted by reason of inborn physical defect we do not know.

As emphasized above, the mentally deficient are quantitatively and not qualitatively distinguished from the rest of the population. If we could line up the population in the order of their innate mental equipment, then the mentally defective would be those whose innate equipment falls below a certain arbitrarily selected level. Next above them would come persons whose mental equipment, though not so poor, is still well below the average. They may be called the dull and backward. The Chief Medical Officer of the Board of Education in 1922, on the basis of a careful calculation made with regard to London schoolchildren, estimated that there must be not less than 600,000 backward children of school age in England and Wales. 'This group', he remarked, 'is unable to respond with proper benefit to our educational system, and adds 50,000 recruits to our industrial army every year who are not only unprepared by mental retardation to meet effectually the demands of a full life, but who furnish society with the bulk of its inefficient adults—criminals, paupers, mendicants, and unemployables.'⁸ It is thus apparent that, when we have taken the mental defectives only into account, we have not fully envisaged the problem created by inadequate mental endowment.

So far we have been discussing the number of mental defectives and of dull and backward persons. Can we say anything as to where they are to be found? There are indications that the incidence of mental defect is not the same in every locality. This may perhaps in part account for the variations in the incidence recorded in different places; these variations may not be entirely due to differing degrees of energy displayed in the working of the Act and to differing definitions of defect. But the evidence is as yet so vague that nothing of value can be said about it. We have no better information regarding the distribution of defect among occupational groups or classes. We cannot say with any assurance that defectives are more often found in one social class or in one occupational group than another.

When, however, we come to discuss not merely the distribution of defect in society, but the distribution of mental endowment as a whole, we have some information of no little interest. On a previous page we quoted figures from an investigation in Northumberland showing the results of testing the intelligence of schoolchildren. When this investigation was made, information as to the occupations of the fathers of the children was obtained in all but 176 cases out of a total exceeding 13,000. It was thus possible to place each father in the occupational group to which he belonged, and to calculate the average intelligence quotient for the children of the fathers in each group. The result of this calculation, when occupations of the same type were classed together, was as follows:

TABLE LXXVI.¹

*Occupations of Fathers and Intelligence of Children in
Northumberland.*

<i>Occupations of Fathers</i>	<i>Average I Q of Children.</i>
Professional	112.2
Managerial	110.0
Higher Commercial	109.3
Army, Navy, Police, Postmen	105.5
Shop-keeping	105.0
Engineering	102.9
Foremen	102.7
Building	102.0
Metal Workers, Ship-Builders	100.9
Miscellaneous Industrial Workers	100.6
Miners and Quarrymen	97.6
Agriculture (all classes)	97.6
Low Grade Occupations	96.0

An examination of this table shows that the children of the more skilled and better-paid fathers have on the whole the higher intelligence quotients. The correspondence between the average intelligence of the children and the demands which the occupations make upon the mental faculties of the fathers is in fact remarkable. At the same time it must be remembered that intelligence-tests, as we have already indicated, almost certainly fail to separate entirely the effect of environment and heredity, so that we must not lay too much stress on innate endow-

ment as the sole differentiating element between one group and another. An attempt was also made to divide the fathers into those who worked by brain and those who worked by hand. In so doing, some occupations which could not be readily placed in one or other group were omitted. When the remainder, 12,570 in all, were allocated into one class or the other, the average I.Q. of the children of the fathers who worked by brain turned out to be 106.6, and of those of the fathers who worked by hand 98.6.¹

The evidence so far reviewed in this chapter shows in the first place how very greatly members of the community vary in intelligence, whether that which is defined and measured as intelligence is inborn or in part acquired. It is indeed difficult to exaggerate the huge gap which exists between the most adequately and the least adequately endowed. Genius and imbecile pass one another in our streets. Judging by intellect, which is the chief distinguishing human characteristic, we might fairly place the genius in one species and the imbecile in another. The second lesson is that those least well endowed constitute a problem in themselves, and they are not negligible in numbers. The third conclusion is no less important. Let us compare Table LXXIII, the result of ascertaining the number of children with different grades of intelligence, with Table LXXVI, the result of calculating the average intelligence of the same children classified according to the occupations of the fathers. Having ascertained the huge range of difference as shown in Table LXXIII, we might have found on working out Table LXXVI that all the most intelligent children were offspring of fathers engaged in the most skilled occupations, and that all the least intelligent were offspring of the least skilled fathers. On the other hand, we might have found no difference between the average intelligence of the offspring of fathers of different occupations. In fact, we do not get either of these results, but one which is intermediate, inclining rather more to the latter than to the former of the two possible extremes.

How are we to interpret these results? The explanation is not far to seek. The occupation which a man follows is not in all cases wholly independent of his inborn intellectual qualities, nor is it wholly governed by his native capacity. There is a sifting mechanism at work which, very incomplete though it is, does something to sort out the members of the community according to their inborn intelligence and to allocate the more intelligent to the more skilled and better-paid posts. This mechanism is in part directly designed to that end. We refer to the educational ladder. Further, society is in fact so organized that a rise in the social scale is not impossible. In proof of this we may recall our summary on p. 143 of an inquiry into the origin of those who control the cotton industry. There is thus some tendency for the more intelligent to get into certain occupations. Moreover, children tend to inherit the qualities of their fathers. Therefore, the children of those in certain occupations tend to be more intelligent than the children of those in others.

Among inborn characters we have considered intelligence alone, not because other characters are unimportant, but because nothing of importance is known as to their distribution in the population. Though little is known, there is every reason to suppose that the position is similar to that outlined above: it is almost certain that men differ as widely in their innate temperamental, instinctive, and physical qualities as in their inborn intellectual qualities. Again, there can be no doubt that, in regard to these qualities also, there is a class so defective in their inborn endowment as to constitute a serious problem. The existence of a class of persons who are physically defective by nature is obvious. Further, we have every reason to suspect that these other qualities are distributed unequally among the occupational classes. The sifting process does not affect intellectual qualities alone. Men get into or fall out of occupations on account of the presence or absence of qualities other than intellectual. It is not unreasonable

to suppose that the inborn physique of miners is superior to that of tailors, and that men temperamentally energetic, and ambitious tend to occupy the best situations. But, since no definite information is available, we must leave the matter at this point. A census of the inborn qualities of the community is just as desirable as a census of incomes. As yet, however, no plans have been laid for the taking of such a census.

Before leaving this matter, it may be observed that the machinery for sifting the population and allocating members of the community with certain inborn characteristics to particular occupations is undergoing continual improvement. The educational ladder is being broadened; elaborate methods of vocational guidance are being evolved; the entrance to most professions is now barred to those below a certain level of intellectual attainment. In consequence, we must expect the existing average intellectual differences between members of the various occupational classes to grow larger. These considerations make the necessity for an inquiry into the recruitment of the coming generation a matter of great importance. Is the next generation to be recruited to a greater extent from those having more than the average intellectual endowment or from those having less?

THE RECRUITMENT OF THE POPULATION

WE began with an examination of the population of this country. We inquired how many people there are, in what proportion the two sexes and the various age groups are represented. We went on to inquire how and where they live, and the whole discussion up to this point has taken the form of an analysis of the population as it is. But the population is not static. Every day some disappear from the scene and others take their places. It does not, however, follow that those who fall out in any given space of time are replaced by an equal number of new recruits. The population may be increasing or decreasing. Nor does it follow that those who disappear are replaced by the same kind of people. Persons endowed with certain kinds of inborn characteristics may be replaced by persons endowed with other kinds. This process of replacement is always in progress, and it remains to say something about the recruitment of the population in quantity and in quality.

Any discussion of the manner in which the population is now being recruited and of the probable course of events in the near future must be prefaced by some reference to the immediate past. Our interests may centre in the present, as in this book, but the present constitution of the population is only to be understood in the light of events in the last few decades. A very brief reference to past times must, however, suffice.

An increase in population can only come about when the new arrivals, whether by birth or immigration, exceed the departures by death or emigration. Between 1821 and 1921 the population of England and Wales more than trebled.¹ This remarkable increase was due

not to an increase in the rate of arrival, but to a decrease in the rate of departure. The birth-rate remained approximately steady up to about 1876, since which date it has declined.² Immigration has been a negligible factor, and may be disregarded; emigration has fluctuated considerably in volume. The net result is that the annual average percentage increase of the population of England and Wales was relatively high, and remained fairly constant, up to the early years of the present century. The rate of increase then began to decline, owing to the fact that the decline in the death-rate ceased to keep pace with the decline in the birth-rate. The position is summarized for the last forty-five years in the following table:

TABLE LXXVII.³*Population of England and Wales.*

Year.	Population. (M)	Period	Average Annual Percentage Change in given period.			
			Gain by Births	Loss by Deaths	Loss by Migration	Net Increase
1881	26.0					
1891	29.1	1881-1890	3.43	2.03	0.23	1.17
1901	32.6	1891-1900	3.17	1.93	0.03	1.21
1911	36.1	1901-1910	2.87	1.62	0.16	1.09
1921	37.9	1911-1920	2.25	1.44	0.32	0.49
1922	38.2	1921-1922	2.25	1.22	0.23	0.80
1923	38.4	1922-1923	2.05	1.28	0.09	0.68
1924	38.7	1923-1924	1.98	1.16	0.05	0.77
1925	38.9	1924-1925	1.89	1.23	0.03	0.63
1926	39.1	1925-1926	1.83	1.22	0.20	0.41

The decline in the birth-rate requires some further analysis. It is not due to a decline in the marriage rate. The average number of persons married per 1,000 living at all ages has fluctuated slightly during the period, but shows no tendency to decline.⁴ Our attention is next directed to the ages of wives, which is important because the possibility of bearing children ceases round about the age of 45. We find that the number of wives under 45 per 1,000 of the total population has not sensibly changed. It was 115 in 1871 and 121 in 1921.⁵ But

when we look more closely at these figures, we find that out of 1,000 wives under 45 the proportion under 35 has decreased, being 607 in 1871 and 538 in 1921.⁶ The importance of this lies in the fact that women under 45 are not all equally fertile—the older the wife, the less is the chance of bearing a child. It thus follows that some part at least of the decline in the birth-rate has been due to a change in the average age of wives. It can, however, be shown that this has not been the chief factor in the decline. We can calculate to what degree the chance of bearing a child is lessened by increasing age, and we can therefore calculate the influence which this factor has had in producing the decline. The results of such a calculation are set out in the following table, where the birth-rate in 1921 is taken as equivalent to 100. Since 1871 the birth-rate has declined from 166 to 100, not allowing for change in age of wives. When allowance is made, the decline has been from 150 to 100.

TABLE LXXVIII⁷

Indices showing the Effect on the Birth-rate (births per 1,000 married women aged 15-45) of allowing for the Ages of Mothers.

Birth-rate Index (1921 Rate = 100).

<i>Year.</i>	<i>Not allowing for Age</i>	<i>Allowing for Age</i>
1871	166	150
1881	162	148
1891	150	138
1901	134	125
1911	112	110
1921	100	100

Evidently the decline is in the main due to a decrease in the number of children born to wives irrespective of age. It is now very generally held, for a variety of reasons into which it is not possible to go, that this decline is the result of the deliberate restriction of the size of the family. There are no grounds for suspecting that any other factor is at work, such as a decline in reproductive capacity. Evidence from many different sources points to deliberate family limitation as the main cause,

The cause of the decline in the death-rate is not obscure. It is due to improvements in housing, sanitation, hygiene, and medical skill. There is one matter only which deserves attention. These improvements were first effective chiefly in regard to the older age groups. Only since about 1900 has any serious improvement been brought about in the death-rate of infants. The number of deaths of infants under one year of age was 149 in 1890-2, 146 in 1900-2, since when it has continuously declined. It was 69 per 1,000 in 1923, 75 in 1924 and in 1925.⁸ The importance of this observation lies in the fact that the decline in the death-rate cannot be expected to continue at the former pace. Much remains to be done both in increasing knowledge of hygiene and in applying such knowledge as we have; but there is not now any very black spot such as existed twenty years ago where, by the application of knowledge, dramatic reductions in the death-rate can be brought about.

This past history throws light upon the present constitution and future prospects of the population of the country so far as quantity is concerned. We observed in the first chapter that there is no such thing as a standard age distribution. We cannot therefore say that the present age distribution is peculiar in the sense that it departs from the normal. But the age distribution of any population is governed by the course of events in the immediate past, and the governing events of the immediate past in this country are such as do not often occur. We can therefore say that the present age distribution of our population is unusual. We live at a time when the population after a period of rapid increase is increasing much less fast. Let us ask what this implies so far as the present age distribution is concerned, and how it has affected recent changes in that distribution.

The influence of these events upon the present age distribution can best be understood if we recall that when those of 60 years of age and over were born, the population was little more than half its present size.

Had the population of 60 years ago been of the present size, we should have had with us now many more persons of advanced age. In other words, owing to the rapid increase in the near past the average age is younger than it would have been if numbers had been stable. But in the immediate past the rate of increase has declined, with the result that the age distribution has been changing in the direction of a relative decrease in the number of the young and a relative increase in the number of the old. This process, which is brought out in Table V of Chapter I, has not gone so far that we cannot still call the age distribution somewhat unusual. The table shows that the proportion both of infants and of school-children has declined, that the proportion of those between 15 and 65 and of those over 65 has increased. If the fifty years between 15 and 65 can be regarded as working years, then the proportion of those of working age has increased. The main factors giving rise to the age distribution of males in 1921 alone have been referred to because the main features only of that distribution are illustrated in the table. If the age distribution is examined in greater detail it is found to be still more unusual than is here indicated, owing to the combined effects of the war and of emigration.

Can any forecast be made of the future size and age distribution of the population of this country? Any forecast of this nature must be based upon assumptions regarding birth-rates and death-rates, emigration and immigration, and must accordingly be merely tentative. So much may be granted at once. Nevertheless, such forecasts have their uses, as the following discussion will show. Some, though of limited scope, are less hypothetical than others because they are based upon assumptions regarding the death-rate only. They give no picture of the total population or of the total age distribution at any future date, because to estimate these we must make assumptions regarding the birth-rate as well as regarding the death-rate.

Forecasts of this nature may be made in respect of

the number of those entering industry for the next fourteen years, for the total number of persons of working age, and for the number past working age. The birth-rate does not enter into the calculation, because those with whom the forecasts are concerned are now alive. It is necessary only to assume a certain death-rate and to make clear whether or not migration is anticipated and, if so, to what extent. Professor Bowley, to whom the estimates here quoted are due, assumes that there is no migration and that the death-rates are as in 1910-12. On these assumptions he forecasts that the number of boys and girls coming year by year into the labour market will fall further than it has already fallen. It can further be foretold that there will be certain fluctuations in the annual number of recruits, as, for instance, that about 1932 there will be a special diminution when the children born in 1917 and 1918 come of working age. With the same assumptions he calculates that in 1931 those between 15 and 65 will form 68 per cent. of the population as against 66 per cent. in 1921, and that those 65 years and over will form 7 per cent. as against 6 per cent.⁹

It is not likely that estimates of this nature will be found to be wide of the mark. There may, of course, be some unforeseen epidemic or catastrophe and in consequence a vast increase in the death-rate. There can hardly be any substantial decrease in that rate. Thus, these forecasts of limited scope command confidence, and upon such foundations it is possible to build plans for the future development of industry and of the social services. When, however, we extend the range of the forecasts and attempt to estimate how many would-be entrants to industry there will be fifteen years ahead, or what the total population will be even one year ahead, we have to introduce another element of uncertainty, namely an estimate of the birth-rate, into our calculations.

To Professor Bowley we also owe forecasts of more extended range. Assuming as before that the death-rate is as in 1910-12 and that there is no migration, and

assuming in addition that the annual number of births is the same as in 1921-3, he gives the following table:

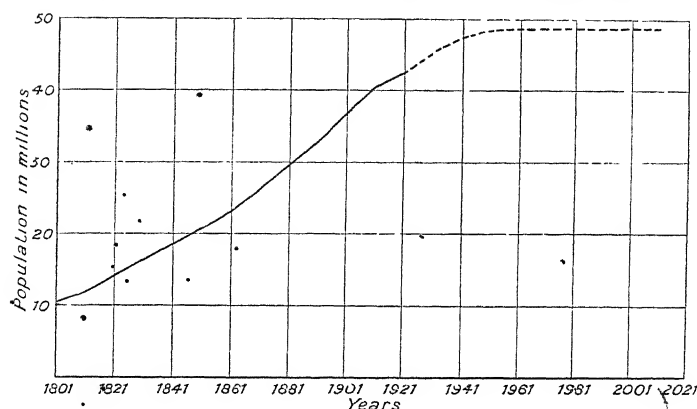
TABLE LXXIX "

The Population of Great Britain.

(On the hypothesis that the annual number of births is the same as in 1921-3, that death-rates are as in 1910-12, and that there is no migration)

Age	Males						
	1921	1931	1941	1951	1971	1991	2011
0-15	6,011	5,666	5,788	5,788	5,788	5,788	5,788
15-45	9,358	10,241	10,690	10,726	10,564	10,564	10,564
45-65	3,949	4,463	4,538	4,954	5,381	5,389	5,389
65-	1,103	1,386	1,737	1,862	2,110	2,191	2,223
Total	20,421	21,756	22,753	23,330	23,843	23,932	23,964
15-65	13,307	14,704	15,228	15,680	15,945	15,953	15,953
Age	Females						
	1921	1931	1941	1951	1971	1991	2011
0-15	5,929	5,585	5,713	5,713	5,713	5,713	5,713
15-45	10,657	11,125	10,974	10,683	10,515	10,515	10,515
45-65	4,279	5,125	5,595	5,949	5,797	5,676	5,676
65-	1,480	1,790	2,247	2,602	2,991	2,860	2,836
Total	22,345	23,625	24,529	24,947	25,016	24,764	24,740
15-65	14,936	16,250	16,569	16,632	16,312	16,191	16,191
20-45	8,643	9,182	9,138	8,847	8,679	8,679	8,679
Total M & F	42,766	45,381	47,282	48,277	48,859	48,696	48,704
Percentages of Total Population							
0-15 M & F	28	25	24½	24	23½	23½	23½
15-65 M	31	32	32	32½	32½	32½	32½
15-65 F	35	36	35	34½	33½	33½	33½
65- M & F.	6	7	8½	9	10½	10½	10½

It appears that on these assumptions we may anticipate but a slow increase of the population of Great Britain up to the middle of the century, when it will stabilize at between 48 and 49 millions. We may also anticipate a decrease in the disproportion between the sexes. There will be a change in the age distribution in the form of a shift from the youngest to the oldest class. It is calculated that in 1971 those between 15 and 65 will form 66 per cent. of the total population as they did in 1921, but that those under 15 will form 23½ per cent. as against 28 per cent., and those over 65, 10½ per cent. as against 6 per cent.



Graph showing increase in Population of Great Britain 1801-1921, actual,
1921-2011, estimated

It may well be asked at this point how the calculation can arrive at this result. We start with a condition where the annual number of births exceeds the annual number of deaths, and anticipate a rapid stabilization of the population. It is to be noted that, whereas we do assume the annual number of births to remain the same, we do not anticipate the annual number of deaths to remain the same; we merely assume that the average number of persons per 1,000 in any age group who die in a year remains constant. The death-rate is much higher, therefore, for the older than for the middle age groups. It follows that, the death-rate remaining the same in each age group, the annual number of deaths will be greater when a high percentage of the total population is located in the older age groups rather than in the younger age groups. But we have seen that the older age groups are coming to form a larger proportion of the total, and it therefore follows that the annual number of deaths will increase in spite of the fact that the true death-rate remains the same. Here is to be found the explanation of the fact so remarkable at first sight that, although the population is now increasing, it is not necessary that the birth-rate should decrease in the future in order that this increase should be brought to an end.

We may ask what reliance is to be placed upon the estimate we have quoted. The most uncertain factor is the birth-rate. The birth-rate still falls year by year. The number of births in Great Britain was 895,209 in 1922, 870,033 in 1923, 836,833 in 1924, 814,719 in 1925, and 797,347 in 1926.¹⁰ Professor Bowley's estimate assumes that the annual number remains as in 1921-3. It looks as though changes in the birth-rate which we cannot foretell will seriously affect these calculations. New arrivals will be less than assumed. On the other hand, emigration is causing no inappreciable number of departures, whereas the estimate is based on the assumption that there will be no loss by migration. The net loss by emigration to countries out of Europe from Great Britain and Northern Ireland was 91,262 in 1924, 84,259 in 1925, and 115,538 in 1926.¹¹ It does not seem as though any fall in the death-rate below the level assumed could be of sufficient magnitude to leave the forecast unaffected.

Of what use, it may finally be asked, is such an estimate if it must of necessity be based upon assumptions that are not likely to be fulfilled? Clearly enough it cannot be used in the same manner as estimates of more limited scope, as a basis for planning schemes of industrial organization. But this is no indictment of the usefulness of long-time forecasts, because it is in any case impracticable to plan so far ahead. The value of the forecast is not far to seek. It shows what is at first sight contrary to all expectation: that in spite of the present annual increase of population a birth-rate and a death-rate of about the present magnitude, in a population of the unusual age distribution shown by our own, will lead before many years, and only after a relatively small extra increase in size, to a stable population.

Our concern regarding the recruitment of the population does not end with numbers. We are also interested in the quality of the recruits. By quality is here meant the innate qualities or natural endowment of the new arrivals. It is obvious that the endowment of the new arrivals is not necessarily the same as that of those whose

places they take. If those with poor natural intelligence contribute on the average more to the next generation than those with good intelligence, there will be a change in the average endowment of the population. Can we say what changes, if any, are now in progress?

In order to answer this question satisfactorily we require to be able to mark off all those with certain inborn qualities, to count the number of children born to them, and also the proportion who survive to adult age. We could then compare the contribution which a certain number of these persons, say 1,000, made on the average to the next generation with the contribution made on the average by the same number of persons with a different endowment. We do not possess evidence of this nature.

In the first place, the groups which we can mark off are usually distinguished primarily by sociological characteristics, whether or not they are also distinguished biologically. Secondly, the information available regarding the contributions made by these groups to future generations is never complete and sometimes extends only to the birth-rate. We must, however, make the best of what we have, and we propose to say something regarding three different types of group, distinguished in the first case by social status, in the second by geographical area, and in the third by achievement.

The Registrar-General has devised a classification intended to separate occupied males into 'different social grades'.¹² Every occupation recorded in the census is allocated to one of the following eight social classes: Class I, Upper and Middle; Class II, Intermediate; Class III, Skilled; Class IV, Intermediate; Class V, Unskilled; Class VI, Textile Workers; Class VII, Miners; Class VIII, Agricultural Labourers. It would be possible to allocate all occupied males to the first five classes, in which case the great majority of those comprising the so-called 'working class' would fall within Classes III to V. In fact, members of the working class engaged in the textile, mining, and agricultural industries are not included in Classes III to V, but are

allocated to Classes VI to VIII respectively. Two principles are thus followed in making this classification. The social standing of those following any occupation is the criterion in respect of allocation between the first five classes. Thus a clerk is placed in Class I and a shop assistant in Class II, though the latter may have a higher income than the former. Nevertheless, it is clear that Classes I to V are also distinguished by economic and occupational differences. Members of Class I, for instance, have on the average higher incomes than members of Class II, and members of Classes I and II comprise the commercial and professional occupations, whereas Classes III to V comprise the manual labour occupations. In the case, however, of Classes VI to VIII the criterion is industrial, though it must be remembered that working-class followers of these occupations alone are placed in these classes.

The census of 1911 included questions in respect of each married woman as to the number of years the marriage had lasted, the children living, and the children who had died. Information as to the occupation of the husband was also given on the returns. It was thus possible to obtain information regarding the fertility of marriage in the different social classes. The facts disclosed are illustrated in Table LXXX. It will be seen that, when the first five social classes are considered, effective fertility, as measured by children surviving, increases regularly with descent in the social scale. With regard to members of Classes VI to VIII it has to be recollected that, if instead of being allocated to these classes, they had been distributed among the first five classes, they would all have fallen within Classes III to V, though the members of each of the Classes VI to VIII would no doubt not be found to contribute equal proportions to Classes III to V. Bearing this in mind, it is worthy of note that members of Class VI, the textile workers, have an effective fertility between that of Classes I and II. The birth-rate of textile workers is relatively low, and their child mortality is relatively high.

Miners (Class VII) and agricultural labourers (Class VIII) have approximately the same effective fertility, though they reach their result by different paths. The former have a high birth-rate and a high child mortality, and the latter a lower birth-rate and a low child mortality.

TABLE LXXX¹¹

England and Wales, 1911. Men 15 and over where the Wife had not attained the Age of 45 Years at Census. Total and Effective Fertility and Child Mortality classified by Social Status (as indicated by Husband's Occupation) for all Durations of Marriage.

	Social Class							
	1	2.	3	4	5	6	7	8.
Children born per 100 families	190	241	279	287	337	238	358	327
Children dead per 1,000 born	116	147	167	173	206	200	213	131
Children surviving per 100 families	168	205	232	237	268	191	282	284

The differences in effective fertility in Table LXXX are in part due to differences between the classes in respect of numbers of children born to married women irrespective of age, in part to differences in respect of age at marriage, and in part to differences in child mortality. We are, however, at present concerned not with the relative parts played by each of these factors, but with the net result, because our object is to throw light upon the contributions made by each class to the next generation. There is, however, another factor affecting these contributions which has not yet been mentioned. We refer to the differences in the amount of marriage within each class. The best indication of the frequency of marriage would seem to be the proportion of married men aged 45 to 55 per 1,000 occupied men of the same age in each class. These proportions are as follows : Class I, 829 ; Class II, 849 ; Class III, 851 ; Class IV, 850 ; Class V, 758 ; Class VI, 842 ; Class VII, 819 ; Class VIII, 735.¹⁴ These figures provide us only with rough indications of what we want to know. If we take the proportion of married men in the earlier age groups, they depend largely upon age at marriage ; if we take later age groups, they are influenced by mortality of wives. Accepting

the figures merely as indications, we see that Classes I and V marry least. The contributions, therefore, of these classes as a whole to the next generation will be less than the number of children surviving per family suggests. If the average number of children surviving per married man in Class I is 1.68, in Class II 2.05, and so on, and if 829 occupied men out of 1,000 in Class I marry, and in Class II 849 out of 1,000 marry, and so on, it follows that when considering families of continuing fertility there will be, per 1,000 occupied men (married and unmarried) in each class, roughly the following relative numbers of legitimate children: Class I, 1,393; Class II, 1,740; Class III, 1,974; Class IV, 2,014; Class V, 2,031; Class VI, 1,608; Class VII, 2,310; Class VIII, 2,087. It is pointed out in the report that 'this does not mean that husbands aged 45 to 55 married to wives under 45 had families of these sizes. The proportions of men married at 45 to 55 are merely used to afford a rough measure of the relative frequency of marriage.'¹⁵ For this purpose they can also be applied to marriages of completed fertility, when the indices come out as follows: Class I, 2,437; Class II, 2,895; Class III, 3,251; Class IV, 3,222; Class V, 2,941; Class VI, 2,787; Class VII, 3,645; Class VIII, 3,359.¹⁶

It is thus evident that differences in the amount of marriage considerably affect the total contributions of the classes to the next generation. So far as the figures given above can be accepted as trustworthy guides, it appears that, as regards marriages of completed fertility in 1911, Classes IV and V did not make as large relative contributions as did Class III. These marriages of completed fertility, however, for the most part date from many years before 1911 when, as we shall see later, it is probable that differences in the contributions made by various classes were much smaller than in 1911. As regards marriages of continuing fertility in 1911, the indications are that there was little difference between the relative contributions of Classes III to V, though,

on the whole, the lower the class the higher the relative contribution.

The connexion between high social status and low effective fertility, which the above figures show in general to exist, can be illustrated by further analysis of these data. Two examples must suffice: (1) If those following Class I occupations are divided into two groups according to social status, then the first group, consisting mainly of those following higher professional occupations, is found to have 174 children surviving per 100 couples as against 187 for all persons in Class I for marriages of continuing fertility.¹⁷ The rates employed in this comparison are standardized for age at marriage. (2) If those within a single industry, railway employees for instance, are considered, it is found that officials and clerks falling within Class I have 78 per cent. of the average standardized fertility, engine-drivers, guards, and signalmen falling into Class III have 91 to 98 per cent., pointsmen falling into Class IV have 98 per cent., and gaugers, labourers, and porters falling into Class V have 101 to 109 per cent.¹⁸

Turning now to the case of groups divided by place of residence, the following table throws some light on the position:

TABLE LXXXI¹⁹

The Ratios of the Number of Children born and of Children surviving per 100 Couples (Wife under 45 at Census), for Certain Classes of Area and Sections of England and Wales, to the Corresponding Figures for the Whole Population taken as 100

	England.						Wales		England and Wales.	
	North		Midland		South					
	Children born	Children surviving	Children born	Children surviving	Children born	Children surviving	Children born	Children surviving	Children born	Children surviving
London										
County Boroughs	102	97	102	100	99	98	107	105	101	98
Other										
Urban Districts	99	97	97	100	89	93	112	109	98	98
Rural Districts	107	109	103	109	96	103	110	112	103	108
All areas	101	98	100	102	95	97	110	109	100	100

The table enables us to compare different regions—the North, Midlands and South of England, and Wales, and different aggregations of population—London, large towns, small towns, and rural areas. In addition, since in Wales there is a distinct national group, it enables the only comparison to be made which is possible between such groups in this country. It will be observed that the differences between the contributions made by these groups are small. Using figures for surviving children as the criterion, these points call for notice. The rural districts make a larger contribution than the urban districts, the Midlands of England than the North or the South, and Wales than England. The superiority of Wales is noteworthy in all classes of area.

The remarkable fact, however, is the smallness of the differences. It is possible to find much larger differences between small areas or between towns when they are compared with one another. But there the differences are due to other factors. Of this, one example must suffice. Between 1881 and 1901 the standardized birth-rate decreased from 35.66 to 23.71 or 34 per cent. in Burnley, from 32.21 to 26.83 or 17 per cent. in London, and from 32.47 to 30.83 or 5 per cent. in Liverpool.²⁰ The fact that Burnley is a textile town accounts for the difference between Burnley and London. The fact that Liverpool has a large Catholic population accounts for the difference between London and Liverpool. Thus these marked differences between these three towns are at least very largely due to factors other than those arising from differences in respect of location.

The mention of the influence of Catholicism directs attention to the problem of the differences between religious groups in respect of fertility. There is no religious census in England, and for our information we depend wholly upon unofficial data. These are not satisfactory, but in view of the interest of the matter it may be worth while quoting some information from Catholic sources. The Catholic diocesan returns for 1924 record 67,565 baptisms and 20,398 marriages.²¹

The ratio of baptisms to marriages is 3.3 to 1. The ratio of births to marriages for the whole country for the same period was 2.4 to 1. This would seem to suggest that the Catholic birth-rate is to the general birth-rate roughly as 3.3 to 2.4.

Groups can also be distinguished by what may conveniently be called achievement. Achievement may be positive or negative, meritorious or otherwise. A considerable amount of scattered information exists regarding various groups which come under this heading. A few facts may be quoted regarding mental deficients as an example of lack of achievement, regarding criminals as an example of non-meritorious achievement, and regarding those who perform well in intelligence-tests as an example of positive achievement.

There is no information which enables us to compare the contribution of mental defectives as a whole with that of the rest of the population. If we knew how many defectives there were and what proportion of them were segregated, this information would be of some value as an indication of the extent to which reproduction by defectives was rendered impossible. Information of this nature is very incomplete. We discussed the number of mental defectives in the last chapter. It appeared that opinion centres round 190,000. On January 1st, 1926, 53,664 defectives were being dealt with in one way or another. It does not follow, however, that these 53,664 are all rendered incapable of reproduction for the time being. Out of the total, 20,297 were in institutions and 33,367 were under care outside institutions, that is were under guardianship, statutory or voluntary supervision, or on licence.²² The adults under statutory supervision numbered 12,114, and an inquiry showed that to them had been born 275 children.²³ Reproduction thus continues to a trifling extent among those who are being dealt with. But in general it appears that, as a result of such supervision as exists, reproduction is very much reduced among the 53,664 defectives—over a quarter of the estimated total.

It thus seems that, unless those defectives who are not under any kind of control or supervision are much more fertile than the population as a whole, the entire group of defectives is not making a contribution to the next generation which in proportion to their numbers is equal to that made by the remainder of the population. The same probably holds good of the criminal class. Dr. Goring made an elaborate study of the records of over 2,000 convicts, and came to the conclusion that the ratio of the absolute fertility of criminals to the absolute fertility of the general community is roughly as 5 to 8.²¹

There are various pieces of evidence bearing upon the contributions made by those marked out by the possession of more than average intellectual powers. One of the most recent and most interesting investigations into this subject approaches the matter indirectly. Sutherland and Godfrey Thomson worked out the correlation between the size of family and intelligence as given by intelligence-tests among 1,924 elementary schoolchildren in the Isle of Wight. They found a negative correlation of 0.218.²⁵ Other evidence bearing upon this problem goes to confirm this result, namely, that the more intelligent parents, intelligence being estimated in various ways, make a somewhat smaller contribution to the next generation than the less intelligent parents.

Finally we may inquire as to what evidence there is as to changes in the rates of contribution made by the various groups of the population. Dr. Stevenson carried back his inquiries to marriages dating from 1851 and onwards, and constructed tables for earlier years similar to the one for 1911 which we have reproduced as Table LXXX. In general, this evidence points to the fact that, the further back the tables are carried, the less evidence is there of class inequality in respect of fertility. Dr. Stevenson suggests that 'if the comparison could have been carried twenty years further back, a period of substantial equality between all classes might possibly have been met with'.²⁶

Such changes as may be in progress at present are of

more interest, however, than the past history of class inequality in relation to fertility. The following table shows the birth-rate per 1,000 married men in the eight social classes for 1911 and 1921.

TABLE LXXXII ²⁷

England and Wales Legitimate Birth-rates in Certain Social Classes, 1911 and 1921.

<i>Description of Class</i>	1911	1921
	<i>Births per 1,000 Married Men under 55 Years of Age</i>	<i>Births per 1,000 Married Men under 55 Years of Age</i>
I Upper and Middle Class	119	98
II. Intermediate	132	105
III. Skilled Workmen	153	134
IV. Intermediate	158	153
V. Unskilled Workmen	213	178
VI Textile Workers (not included above)	125	110
VII. Miners „	230	202
VIII. Agricultural Labourers „	161	155
III-VIII. Working Classes	175	152
All Classes	162	141

Unfortunately, however, so far as this particular question is concerned, the occupational classification was completely revised in 1921, with the result that the figures for 1911 and 1921 of Table LXXXII are not wholly comparable. In 1911 the classification, it will be remembered, was largely industrial, whereas in 1921 it was occupational as well as industrial. These changes made possible a more satisfactory allocation of occupations to their several social grades. In consequence, the proportions of occupations falling into the different grades are not the same in 1921 as in 1911. One example of this is that the present Class I now comprises little more than that upper section of the old Class I to which reference was made on page 233.²⁸ In spite of these drastic changes in classification, which vitiate comparison between 1911 and 1921 in any detail, certain broad conclusions can be

drawn with safety. The fall in birth-rate with the rise in social scale which was apparent in 1911 is no less striking in 1921. Also, the fact that in every single class the birth-rate is less in 1921 than in 1911, points to the strong probability that this decline is general and not confined to any one section of the population.

Different rates of contribution by different groups in the population may be of importance in two ways. When groups differ in respect of sociological characters, children brought up in one group will absorb a social tradition different from that absorbed by children in other groups. Therefore, where differential contributions occur between groups so distinguished, children brought up in one tradition will form a larger or smaller fraction of the next generation than their parents formed of their generation. When groups are distinguished biologically, there will come about changes in the biological endowment of the population. Members of different social classes are primarily distinguished by the possession of different social traditions. There is some evidence that they are not equally endowed on the average with that particular type of intelligence which is measured by intelligence-tests. Therefore, the fact that the higher classes make a contribution less than the average to future generations may be biologically unfavourable so far as this one quality is concerned. This conclusion finds support in the evidence that the more intelligent come from the smaller families. On the other hand, so far as mental defectives and criminals are biologically inferior, their less than average contribution, if it be a fact, is biologically favourable.

In respect therefore of inborn intelligence, differential rates of contribution may be favourable in some ways and unfavourable in others. On the balance they are more likely to be unfavourable than favourable because of the definite evidence of low rates of contribution by those whom there is good reason to regard as particularly well endowed. The evidence of low rates of contribution by the very poorly endowed is far less definite. But

inborn intelligence is not all. Unfortunately, however, we know nothing as to the extent to which those who are well or ill endowed temperamentally and physically are contributing to future generations. Thus the net results of differential rates of contribution may be favourable or unfavourable. It is at least possible that, even if they are unfavourable in respect of inborn intelligence, they may be favourable in respect of temperament and physique and that, therefore, the general trend may not be in the direction of biological degeneration. It is a matter most urgently in need of further inquiry, because we already have evidence of large differences between different groups in their rates of contribution to the future population, and such differences are capable of causing important biological changes in a comparatively short period.

APPENDIX

The following abbreviations are used for some of the Government and other publications quoted:

C.G.	=	Census of England and Wales, 1921, General Tables.
C.R.	=	" " " " " " Report.
C.I.	=	" " " " " " Industry Tables.
C.O.	=	" " " " " " Occupations.
C.D.	=	" " " " " " Dependency, Orphanhood, and Fertility.
C.S.	=	" " Scotland, 1921, Vol. II.
S.R.	=	Registrar-General's Statistical Review of England and Wales.
S.A.	=	Statistical Abstract for the United Kingdom (70th Number, unless otherwise stated).
L.S.	=	Abstract of Labour Statistics (18th Number, unless otherwise stated).
L.G.	=	Ministry of Labour Gazette.
Ed.R.	=	Report of Board of Education.
Ed.S.	=	Statistics of Public Education.
Ed.H.	=	Health of the School Child.
Min.L.	=	Report of the Ministry of Labour.
M.R.C.	=	Medical Research Council.
J.R.S.S.	=	Journal of the Royal Statistical Society.

Note —The numbers refer to pages in the volumes quoted. Dates refer to the periods to which the volumes apply, unless put in brackets, when they are the dates of publication

Ch. I. (1) Compiled from C.G. 1 ; C.S. v. (2) J.R.S.S. 1927, Part II, 426, 428. (3) C.R. 60. (4) C.R. 61. (5) C.G. 143, (6) Compiled from C.G. 142 ; C.S. 167. (7) Ed.R. 1918-19, 95. (8) See (6) ; Committee on Industry and Trade : 'Survey of Industrial Relations' (1926), 70. (9) C.G. 145. (10) C.R. 81. (11) C.R. 84. (12) S.R. 1925, Part II, 5. (13) S.R. 1925, Text 123-4. (14) C.R. 83. (15) C.G. 85. (16) C.G. 82. (17) This is the difference between the total population of England and Wales and the private family population. (18) C.G. 121. (19) C.G. 92. (20) C.R. 165. (21) C.D. 2-3.

- Ch. II.* (1) C.G. 82. (2) C.R. 51 ; C.G. 85. (3) C.G. 100, 96. (4) C.R. 35. (5) C.G. 85, 93. (6) C.G. 95. (7) C.S. xxxviii. (8) C.S. xxxix. (9) C.S. xl, xlii. (10) C.S. xlv. (11) 'Housing of the Nation', Fremantle (1927), 24. (12) C.R. 44. (13) C.R. 37. (14) See (11) 181. (15) Ditto, 179. (16) Ditto, 31.
- Ch. III.* (1) The urban and rural acreage are calculated roughly from the population and density per acre—C.G. 11, 33. (2) C.R. 23. (3) C.R. 23-4. (4) C.O. 138-40, 222. (5) C.R. 98. (6) C.G. 3.
- Ch. IV.* (1) Compiled from C.I. Table 1. (2) 1,171,298 out of 12,112,718 in 1921—C.O. 2 ; 1,544,087, or 23.5 per cent of total males occupied, aged 10 and upwards, in 1851—1911 Census, Vol. X, Part. I, xlv. (3) Committee on Industry and Trade Survey of Industrial Relations (1926), 62. (4) Ditto, 63. (5) L.G. (Nov. 1926), 417. (6) Report of Chief Inspector of Factories and Workshops, 1925, 4-5. (7) Compiled from C.I. Table 3.
- Ch. V.* (1) Compiled from C.O. Table 1. (2) Estimated from figures given in C.O. 16, xxiv, 1. (3) Compiled from C.O. 16, 20. (4) C.I. 13,188,191. (5) People's Year Book (1926), 26. (6) C.O. 16. (7) M.R.C. Report, 33 : 'A Study in Vocational Guidance' (1926), 13, 16. (8) Number of Males, 12 years and over, 13,901,108 ; Number Occupied, 12,112,718—C.O. 2. (9) Compiled from C.O. 20,109 ; C.G. 174. (10) Number of Females, 12 years and over, single, widowed, or divorced = 8,109,798—C.O. 54.
- Ch. VI.* (1) C.O. 2, 54. (2) Census of Production of the United Kingdom, Final Report (1912), 8. (3) Ditto, 9. (4) 'The National Income, 1924', Bowley and Stamp (1927), 12. (5) Compiled from C.O. 2, 54, 140, 222. (6) This table is the result of somewhat lengthy calculations based on material found in C.I. Table 2. (7) Compiled from C.O. 18-19. (8) Estimated on basis of numbers given in S.A., 69th Number, 258-61. (9) The more and the less skilled then number 218,199 and 192,406 respectively. (10) 'Labour and Life of the People', Booth (1889), Vol. I, 33. (11) See Ch. xx (12).

Ch. VII. (1) L.G. (Nov. 1926), 423 (2) Ditto, 398. (3) Total numbers in Great Britain engaged in Agriculture and in Coal and Shale Mining in 1921 were 1,307,000 and 1,305,000 respectively; total trade-union membership in the two industries in Great Britain and Northern Ireland in 1921 was 149,000 and 935,000 respectively—L.S. 2, 16, 175. (4) See (1) 399. (5) Report of Trades Union Congress (1926), 10, 16, 17, 21. (6) Ditto, compiled from pages 10 to 48 (7) Statistical Summary showing the Operations of Registered Trade Unions, 1915-24.

Ch. VIII. (1) 'The Goodly Heritage of the Free Churches', Jeffs (1927), 109 (2) Whitaker (1927), 290. (3) Church of England Year Book (1927), 470, 488. (4) Catholic Directory (1927), 595 E. (5) See (2) 289. (6) Oliver and Boyd's Edinburgh Almanac (1927), 692 (7) Ditto, 254 (8) See (2) 291 (9) Minutes of Conference (1926), 411. (10) By letter from Secretary of the Congregational Union of England and Wales (May 1927) (11) Baptist Handbook (1927), 175. (12) Preface to Catholic Directory (1926). (13) Labour Year Book (1926), 19. (14) Eighth Congress of the Communist Party of Great Britain (1926), 39. (15) United Kingdom Alliance Year Book (1927), 191. (16) Ditto, 106. (17) Ditto, 107.

Ch. IX. (1) 'The National Income, 1924', Bowley and Stamp (1927), 39. (2) 'Wealth and Taxable Capacity', Stamp (1922), 40 (3) J.R.S.S. (Dec. 1910). (4) See (1) Ch. v. (5) See (1) 47. (6) See (1) 58. (7) See (1) 49-50. (8) See (1) 57. (9) 'The Change in the Distribution of the National Income, 1880-1913', Bowley (1920), 22. (10) See (1) 50-2. (11) See (1) 58-9. (12) Sixty-ninth Report of the Commissioners of H.M. Inland Revenue, 102. (13) See (1) 57-8. (14) The result of a sample investigation made by the Board of Inland Revenue—See Appendices to the Report of the Committee on National Debt and Taxation (1927), 133. (15) Ditto, 134-5. (16) See (2) 94.

Ch. X. (1) 'British Incomes and Property', Stamp (1922), 379. (2) Ditto, 404-5. (3) Ditto, 41, 43. (4) Ditto, 402-3. (5) 'Wealth and Taxable Capacity', Stamp (1922), 38. (6) Ditto, 101-2. (7) Number of Occupied

persons over 20 in United Kingdom, 1919 = 15·2 million—estimated from S.A. 5 and L.S. 3. (8) 'The Distribution of Capital in England and Wales', Clay—Proceedings of the Manchester Statistical Society, 1924-6. (9) Ditto, 54. (10) Ditto, 58. (11) Ditto, 61. (12) Ditto, Addenda following p. 78 (13) Ditto, 64-5.

Ch. XI. (1) C.G. 174 (2) Ed.R. 1921-2, 95. (3) Ed.S. 1921-2, 4. (4) Ditto, 67 (5) Ed.S. 1922-3, 167. (6) List of Members of the Head Masters' Conference (Feb 1926). (7) Ed.R. 1923-4, 21. (8) Report of Departmental Committee on Scholarships and Free Places (1920), 35. (9) Ed.R. 1923-4, 17. (10) Ed.S. 1924-5, 4 (11) Compiled from Ed.S. 1922-3, 1924-5, 11-12 (12) Ed.R. 1923-4, 18. (13) Ed.S. 1924-5, 69; Ed.R. 1924-5, 99. (14) Ed.S. 1922-3, 72; 1924-5, 74. (15) See (8) 80. (16) Ed.S. 1924-5, 208-9. (17) 'Social Progress and Educational Waste', Lindsay (1926), 23. (18) Ed.R. 1924-5, 104. (19) Ditto, 105 (20) On the basis of numbers on the registers of public elementary schools in England and Wales—Ed. R. 1924-5, 200. (21) Ed.R. 1924-5, 158-161. (22) Ditto, 35-8 (23) Ed.S. 1924-5, 178. (24) Ditto, 120. (25) Compiled from Ed.S. 1922-3, 121. (26) Ed.R. 1924-5, 127-8.

Ch. XII. (1) Report of Committee on Education and Industry (1926), 15. (2) Ditto, 82-3 (3) Factors in Industrial and Commercial Efficiency (1927), 136. (4) See (1) 87. (5) Min.L. 1925, 38. (6) Min.L. 1926, 66, 72. (7) See (3) 20-1. (8) Report of an Enquiry by the Ministry of Labour (1926), 7-8. (9) Ditto, 10. (10) Ditto, 37, 39. (11) M.R.C. Report, 33: 'A Study in Vocational Guidance' (1926), 4-7. (12) J.R.S.S. (May 1913). (13) Welsh Studies in Agricultural Economics, No. 3 (1926). (14) J.R.S.S. (Feb. 1912).

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